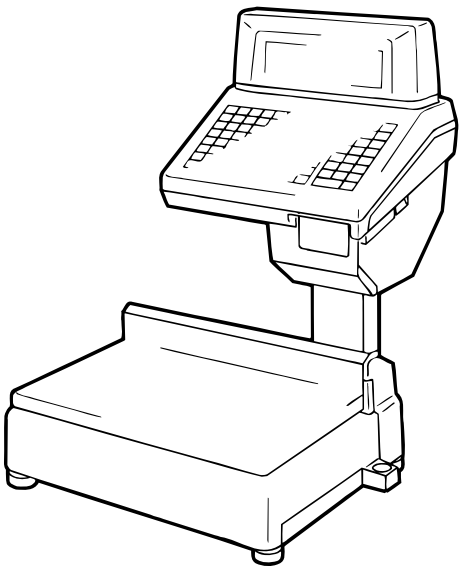
TEC

TEC Electronic Computing Scale

SL-9000/9000N-FFR-US/CA/QR

Owner's Manual



TOSHIBA TEC CORPORATION

Safety Summary

Personal safety in handling or maintaining the equipment is extremely important. Warnings and Cautions necessary for safe handling are included in this manual. All warnings and cautions contained in this manual should be read and understood before handling or maintaining the equipment.
Do not attempt to effect repairs or modifications to this equipment. If a fault occurs that cannot be rectified using the procedures described in this manual, turn off the power, unplug the machine, then contact your authorized TOSHIBA TEC representative for assistance.

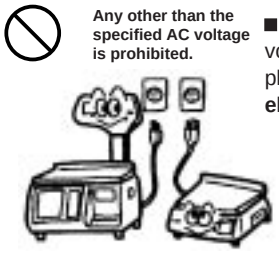
Meanings of Each Symbol

This symbol indicates warning items (including cautions).
Specific warning contents are drawn inside the △ symbol.
(The symbol on the left indicates a general caution.)

This symbol indicates prohibited actions (prohibited items).
Specific prohibited contents are drawn inside or near the ⃠ symbol.
(The symbol on the left indicates “no disassembling”.)

This symbol indicates actions which must be performed.
Specific instructions are drawn inside or near the ● symbol.
(The symbol on the left indicates “disconnect the power cord plug from the outlet”.)

WARNING This indicates that there is the risk of **death** or **serious injury** if the machines are improperly handled contrary to this indication.



■ Do not use voltages other than the voltage (AC) specified on the rating plate, as this may cause **fire** or **electric shock**.

■ Do not plug in or unplug the power cord plug with wet hands as this may cause **electric shock**.

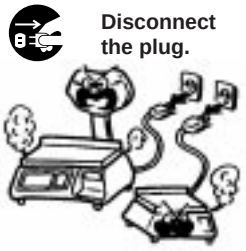
■ If the machines share the same outlet with any other electrical appliances which consume large amounts of power, the voltage will fluctuate widely each time these appliances operate. Be sure to provide an exclusive outlet for the machine as this may cause the machines to **malfunction**.

■ Do not place metal objects or water-filled containers such as flower vases, flower pots or mugs, etc. on top of the machines. If metal objects or spilled liquid enter the machines, this may cause **fire** or **electric shock**.

■ Do not insert or drop metal, flammable or other foreign objects into the machines through the ventilation slits, as this may cause **fire** or **electric shock**.

■ Do not scratch, damage or modify the power cords. Also, do not place heavy objects on, pull on, or excessively bend the cords, as this may cause **fire** or **electrical shock**.

■ If the machines are dropped or their cabinets damaged, first turn off the power switches and disconnect the power cord plugs from the outlet, and then contact your authorized TOSHIBA TEC representative for assistance. Continued use of the machine in that condition may cause **fire** or **electric shock**.



■ Continued use of the machines in an abnormal condition such as when the machines are producing smoke or strange smells may cause **fire** or **electric shock**. In these cases, immediately turn off the power switches and disconnect the power cord plugs from the outlet. Then, contact your authorized TOSHIBA TEC representative for assistance.

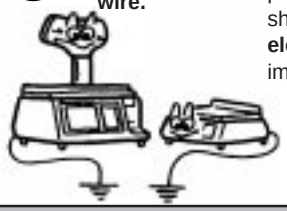
Disconnect the plug.

■ If foreign objects (metal fragments, water, liquids) enter the machines, first turn off the power switches and disconnect the power cord plugs from the outlet, and then contact your authorized TOSHIBA TEC representative for assistance. Continued use of the machine in that condition may cause **fire** or **electric shock.**

Disconnect the plug.

■When unplugging the power cords, be sure to hold and pull on the plug portion. Pulling on the cord portion may cut or expose the internal wires and cause **fire** or **electric shock**.

Connect a grounding wire.



■ Ensure that the equipment is properly grounded. Extension cables should also be grounded. **Fire** or **electric shock** could occur on improperly grounded equipment.

No disassembling.

■ Do not remove covers, repair or modify the machine by yourself. You may be **injured** by high voltage, very hot parts or sharp edges inside the machine.

CAUTION This indicates that there is the risk of personal **Injury** or **damage** to objects if the machines are improperly handled contrary to this indication.

Precautions

The following precautions will help to ensure that this machine will continue to function correctly.

- Try to avoid locations that have the following adverse conditions:
  - * Temperatures out of the specification
  - * Direct sunlight
  - * High humidity
  - * Shared power source
  - * Excessive vibration
  - * Dust/Gas
- Do not subject the machine to sudden shocks.
- Do not press the keys too hard. Keys will operate correctly if they are touched lightly.
- Clean the cover and keyboard, etc. by wiping with a dry cloth or a cloth soaked with detergent and wrung out thoroughly. Never use thinner or other volatile solvent for cleaning.
- To ensure that the scale is operating correctly, place a known weight on the platter and check it for correct weight measurement. This should be done every morning before starting normal operations.
- When moving the machine, take hold of the case and lift the machine. Never hold the remote unit.
- Do not place the machines on unstable or slanted surfaces, as they may drop or fall and cause **injury**.
- USE ONLY TOSHIBA TEC SPECIFIED paper.
- DO NOT STORE the paper or ribbons where they might be exposed to direct sunlight, high temperatures, high humidity, dust, or gas.
- Ensure the machine is operated on a level surface.
- Any data stored in the memory of the machine could be lost during a machine fault.
- Try to avoid using this equipment on the same power supply as high voltage equipment or equipment likely to cause mains interference.
- Unplug the machine whenever you are working inside it or cleaning it.
- Keep your work environment static free.
- Do not place heavy objects on top of the machines, as these items may become unbalanced and fall causing **injury**.
- Do not block the ventilation slits of the machines, as this will cause heat to build up inside the machines and may cause **fire**.
- Do not lean against the machine. It may fall on you and could cause **injury**.
- Care must be taken not to injure yourself with the printer paper cutter.
- Unplug the machine when it is not used for a long period of time.

Request Regarding Maintenance

- Utilize our maintenance services.
  After purchasing the machine, contact your authorized TOSHIBA TEC representative for assistance once a year to have the inside of the machine cleaned. Otherwise, dust will build up inside the machines and may cause a **fire** or a **malfunction**. Cleaning is particularly effective before humid rainy seasons.
- Our preventive maintenance service performs the periodic checks and other work required to maintain the quality and performance of the machines, preventing accidents beforehand.
  For details, please consult your authorized TOSHIBA TEC representative for assistance.
- Using insecticides and other chemicals
  Do not expose the machines to insecticides or other volatile solvents. This will cause the cabinet or other parts to deteriorate or cause the paint to peel.

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CAUTION:

1. *This manual may not be copied in whole or in part without prior written permission of TOSHIBA TEC.*
2. *The contents of this manual may be changed without notification.*
3. *Please refer to your local Authorized Service representative with regard to any queries you may have in this manual.*

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570 Ohito, Ohito-cho, Tagata-gun, Sizuoka-ken, JAPAN

1. INTRODUCTION

1. INTRODUCTION

Thank you for purchasing the TEC SL-9000 Series electronic computing scale. As you will discover, the TEC SL-9000 has many features and functions designed for user friendliness as well as complete customer satisfaction.
The 256×64 dot fluorescent display provides customers with ample information, the 140 speed keys realize a higher degree of operability, and the 3 inch/sec. print speed ensures fast and clear printing.
Password security prevents unauthorized access to the PROG., M.DOWN, REWRAP, REPORT and RESET modes.
The latest high speed in-line system, Local Operation Network (LON), allows easy system configuration and greater throughput.
Various options, including a TMCC Interface, LAN interface, etc., are selectable in accordance with your needs.
We believe that your needs will now be fully satisfied, and you will have total reliability in price calculation. Should you have any questions concerning the scale, please refer to this manual. Be sure to keep this manual for future reference.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operations of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. (for USA only)

Changes or modifications not expressly approved by manufacturer for compliance could void the user's authority to operate the equipment.

"This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations."
"Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada."

(for CANADA only)

Some procedures described in this manual may be illegal in various state jurisdictions. When there are optional settings to enable various functions or to disable functions. Please ensure that the optional settings for scale operation meet the local requirements of weights and measures. If you are uncertain of specific items, contact the state or county office of weights and measures for clarification.

1.1 APPLICABLE MODEL

- SL-9000-30M-N-FFR-US
- SL-9000-15M-N-FFR-CA/QR
- SL-9000-15M-FFR-CA/QR

The description of the model number is as follows.

SL-9000-30M-N-FFR-US

Max. Capacity
30M: 30 lbs (decimal pound /multi-interval)
15M: 15 Kg (multi-interval)

N: LAN (Option) is available.
Blank: LAN (Option) is not available.

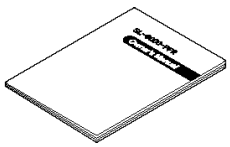
Display Type
FF: Fluorescent full dot display

Keyboard Type
R: Remote keyboard

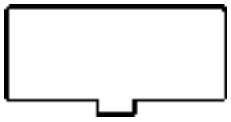
Destination Code
ex.) US,CA, QR, etc.

1.2 ACCESSORIES

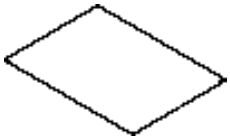
Owner's Manual (EO1-31001)



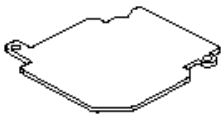
Speed Key Sheet



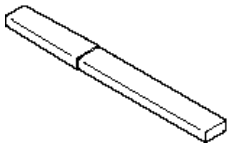
Quality control report (US type only)



Under Panel



Print Head Cleaner (24089500013)



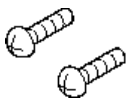
Sealing Lead

Stranded Wire

Remote Bush

Cap. Screw (C-5x25)

Bind Screw (B-4X8)



Flanged Screw (FL-3x6)

Cord Clamp

NOTE : *Check that there are no missing or incorrect parts in the accessories.*

2. SPECIFICATION

2.1 SCALE

Item	US	CA	QR
Maximum Capacity	30 lb	15 Kg (30 lb)	
Minimum Scale Division	0.005 lb (0 - 15 lb.) 0.01 lb (15 - 30 lb.)	0.002 Kg (0 - 6 Kg) 0.005 Kg (6 - 15 Kg) 0.005 lb (0 - 15 lb) 0.01 lb (15 - 30 lb)	
Display Range	0 - 30.05 lb	0 - 15.025 Kg (0 - 30.05 lb)	
Maximum Tare	2.000 lb	1.000 Kg (2.205 lb)	
Unit Price Presettable	$ 0.01 - 99.99	$ 0.01 - 99.99	0 - 99999
Minimum Price Display	$ 0.01	$ 0.01	1

Power Requirement	AC 120 V±10%, 60 Hz (US/CA type) AC 220 V±10%, 50/60 Hz (QR type)
Power Consumption	US/CA: 66 W, 1.1 A (Standby: 26 W, 0.39 A) QR: 70 W, 0.66 A (Standby: 32 W, 0.26 A)
Temperature Limits	32 ° F - 104 ° F (0℃ - 40℃)
Relative Humidity	35 % - 85 % (No condensation)
Message Display	256 x 64 dots Fluorescent display
Weight	5 digits (US/CA type), 5 digits (QR type)
Unit Price	4 digits (US/CA type), 5 digits (QR type)
Total Price	5 digits (US/CA type), 6 digits (QR type)
Remote Display Mode	Dual sides
Capacity of PLU Memory	SL-9000: 560 PLUs (Standard), 240 PLUs when LOGO is available. 3120 PLUs max. (Option) SL-9000N: 3600 PLUs max. (Standard)
Print Head	Thermal Print Head (2 inch wide)
Media Issue Method	On-demand/Batch
Dot Density	193 dots/inch (7.6 dots/mm)
Print Speed	3 inch/sec. (76.2 mm/sec.)
Available Media Width	1.89 inch (48 mm), 2.24 inch (57 mm)
Recommended Media	
Thermal Label	VHTS, VLTB (OSP)/Outer diameter: ϕ 90 mm (Max.)
Variable Length Label	VHTS, VLTB (OSP)/Outer diameter: ϕ 90 mm (Max.)
Thermal Receipt	120 FC (RICHO)/Outer diameter: ϕ 90 mm (Max.)
Interface	CMT/PL-3 interface (Program Loader) LON interface (RS-485) PC-AT KEY interface (Option) TMCC interface (Option) Drawer interface LAN Interface (10 Base T, SL-9000N Option)
Dimensions (approx.)	16.1 inch (width) x 13.0 inch (depth) x 22.0 inch (height) 408 mm (width) x 331 mm (depth) x 558 mm (height)
Weight	37.5 lb (17 Kg)

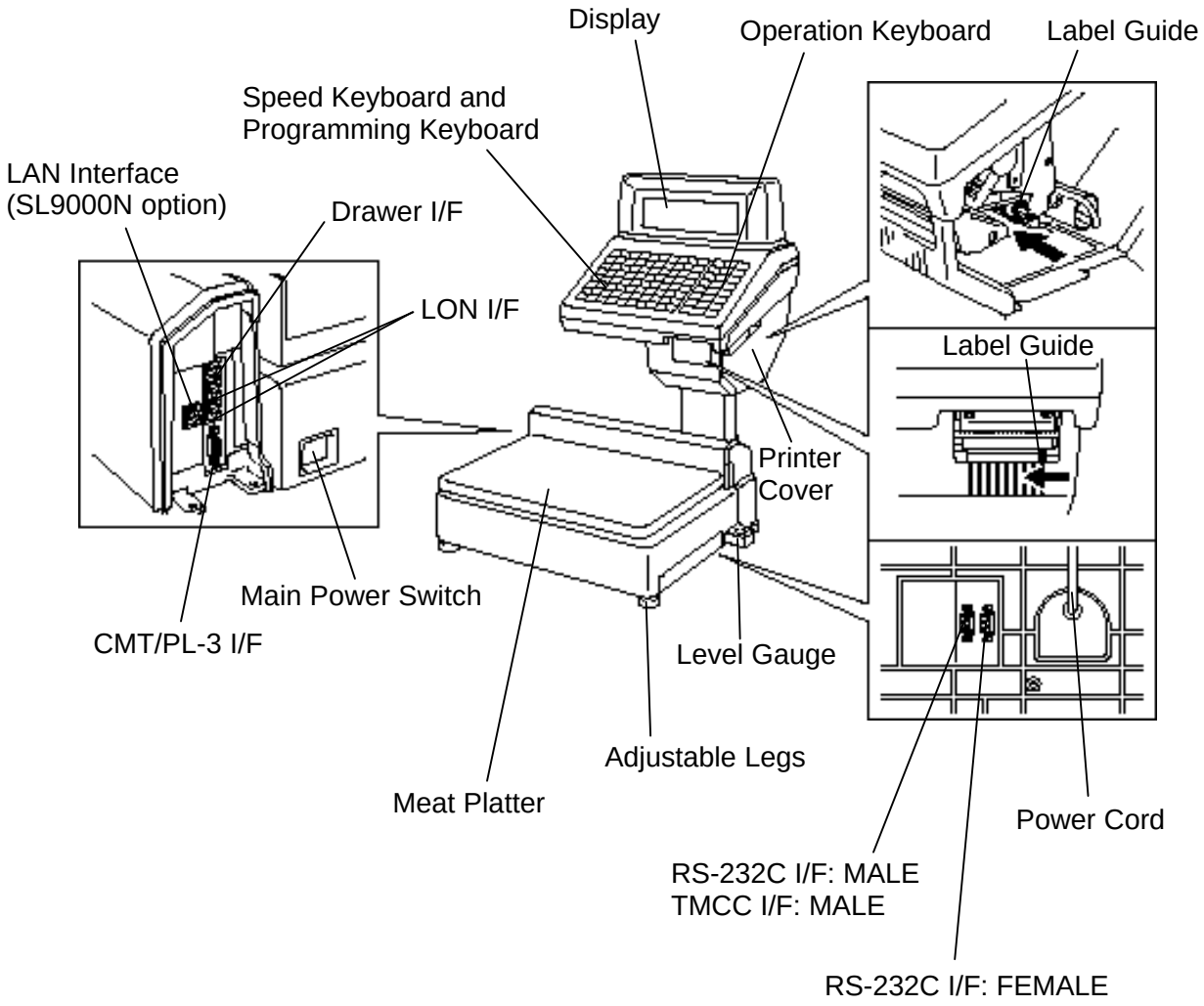
2.2 OPTION

Option Name		Model No. or Part No.	Description	Source
LON	LON Connector TM8P-88P	Part No. EAJ-0028001	A modular connector used to connect scales to each other in a LON configuration.	See Note 2
	LON Terminal Resistor 285D-8P	Part No. EAJ-0029001	A modular resistor attached to the scales connected at both ends of the LON configuration.	See Note 2
	LON Cable S-STLAN-2P (200 m/roll)	Part No. 10319100003	An 8-pin telephone cable used with the LON connectors attached to both ends of the cable. This cable connects scales to each other in a LON configuration.	See Note 2
TMCC	I/O PC Board	OP-9000-IOB	An I/O board equipped with the TMCC interface and PC-AT keyboard interface ports. It is used to construct a TMCC system and program PLU data, etc..	See Note 1
	TMCC Cable Kit	OP-9000-IOCN-TMCC	A cable kit for the TMCC interface.	See Note 1
MEMO PC Board (SL-9000 only)		OP-9000-PIGGYBACK OP-9000-PIGGYBACK-S/F	This board is used to expand the PLU memory to 4MB by installing the memory module.	See Note 1
Memory Module		OP-9000-RAM-512KB	DIP type PS-RAM to be installed on the MEMO PC board (OP-9000-PIGGYBACK) for memory expansion. When expanding the memory, install the two modules as one set.	See Note 1 and 3
		OP-9000-SRAM-512KB	DIP type S-RAM to be installed on the MEMO PC board (OP-9000-PIGGYBACK-S/F) for memory expansion. When expanding the memory, install the two modules as one set.	
10 Base T (LAN) Interface Board (SL-9000N only)		OP-9000N-LAN	This board enables the SL-9000N to be used in a LAN network.	See Note 1

NOTES:

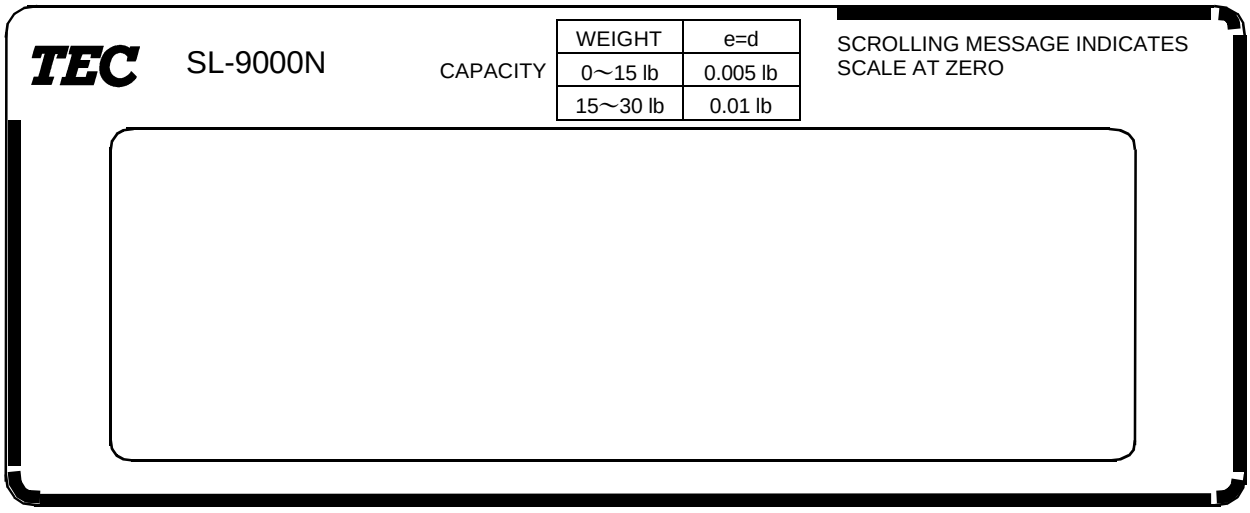
1. *Contact TOSHIBA TEC H.Q. or your nearest TOSHIBA TEC representative.*
2. *Order from TOSHIBA TEC Parts Center or purchase locally.*
3. *When purchasing memory modules locally, select one having the following specifications.*
   - ■ *Maker: HITACHI Pseudo Static RAM (OP-9000-RAM-512KB)*
     HITACH Static RAM (OP-9000-SRAM-512KB)
   - ■ *Type: HM658512ALP-8V 80 ns, 600 mil 32-pin Plastic DIP (DP-32) (OP-9000-RAM-512KB)*
     HM628512ALP-770ns, 600mil 32-pin Plastic DIP (DP-32) (OP-9000-SRAM-512KB)
4. *The MEMO PC Board (Flash ROM type) is installed in the SL-9000N model as standard.*

3. APPEARANCE

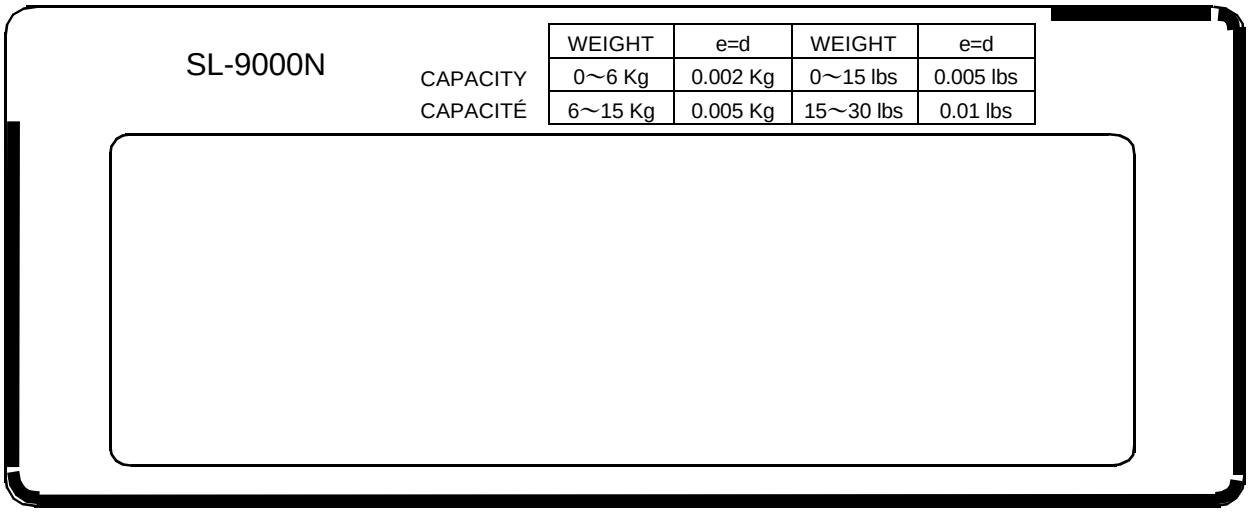


4. DISPLAY

4.1 US TYPE



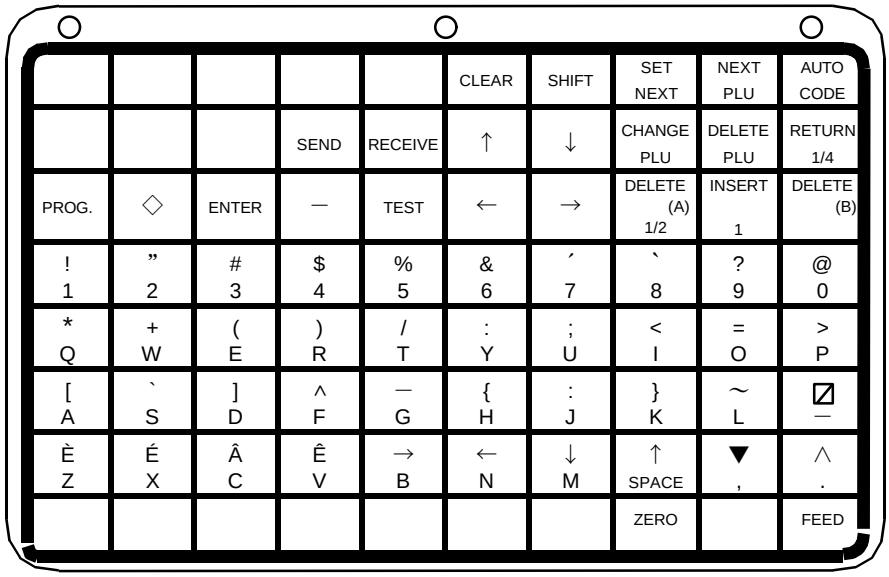
4.2 CA/QR TYPE



***NOTE**: For the SL-9000 model, the model name on the display panel is "SL-9000".*

5. KEY LAYOUT

5.1 PROGRAMMING KEYBOARD



NOTE: *Blank keys have no function.*

■ Programming Keyboard Function

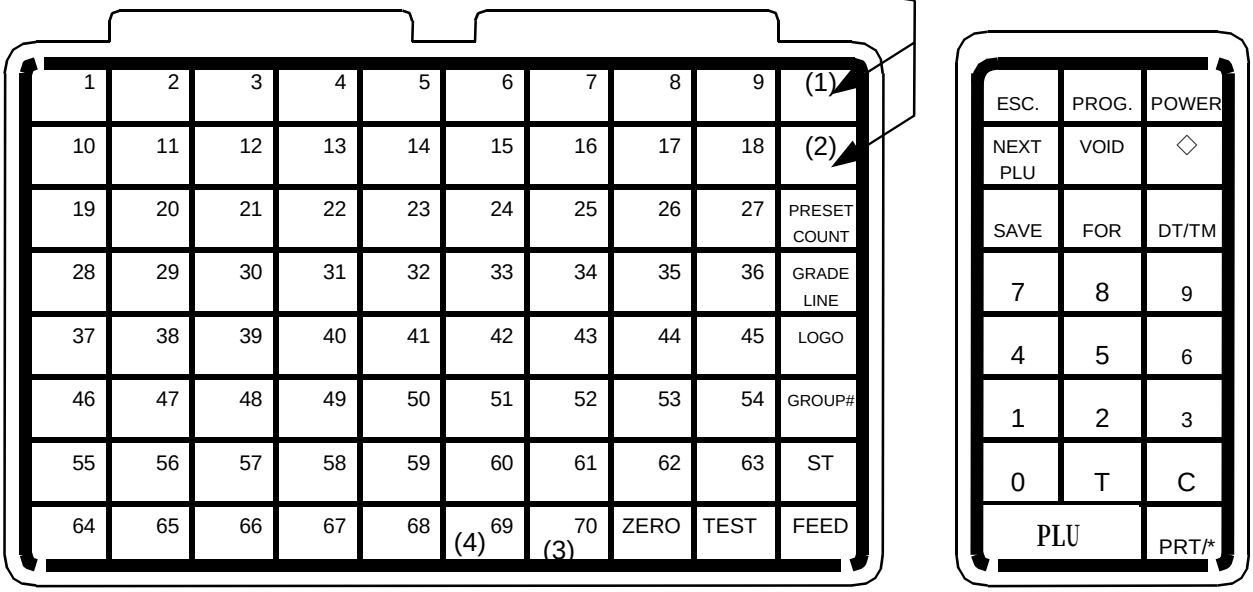
Name of Key	Function
CLEAR	1. Clears numeric data just entered. 2. Releases the scale from the error mode.
SHIFT	Selects the upper case or lower case.
SET NEXT	Calls the PLU # which follows the PLU # currently called. Sets the media transparency on the sensor.
NEXT PLU	Calls the PLU # registered right after currently called PLU #.
AUTO CODE	Sets “AUTO CODE”.
CHANGE PLU	Changes the PLU # currently called.
DELETE PLU	Deletes PLU.
TEST	Prints data set in the currently called PLU.
ENTER	Inputs data to the SL-9000 system during programming.

5. KEY LAYOUT

Name of Key	Function
—	1. Displays the preceding PLU data. 2. Used to set an auto code. 3. Calls the preceding label format # when setting the print position.
←	Moves the cursor to left.
→	Moves the cursor to right.
DELETE (A) 1/2	1. Deletes a character selected by the cursor when setting the commodity name or message. 2. Sets a unit price per 1/2 lb.
INSERT 1	1. Inserts a space at the cursor position when setting the commodity name or message. 2. Sets a unit price per lb/100g/Kg.
DELETE (B)	Deletes all characters on the current setting line when setting the commodity name or message.
RETURN 1/4	1. Displays the next line when setting the ingredient and message. 2. Sets a unit price per 1/4 lb.
↑ SPACE	Inserts a blank space in descriptors.
SEND	Stores “ingredient data” in the temporary memory.
RECEIVE	Calls “ingredient data” from the temporary memory.
↑	Sets the preceding item when setting PLU and nutrition information.
↓	Sets the following item when setting PLU and nutrition information.
PROG.	Returns to the programming menu.
◇	1. Changes the programming menu page. 2. Selects capitals or small letters. 3. Sorts the file when setting PLU data, ingredient data and nutrition data. 4. Sets a block PLU # using the confirmation label procedure. 5. Selects the scrolling message or fixed message. 6. Changes the speed key page and sets a department #. 7. Selects the adjusting item of print format in rotation. 8. Toggles between In-line and Local or in-line and off-line of LON system.
Other Keys	The other 39 keys are used to set the character.

5.2 OPERATION KEYBOARD AND SPEED KEYBOARD

	US type	CA,QR type
(1)	1/2	100 g
(2)	1/4	LB/kg



NOTES: *1. The numbers form 1- 70 indicate the speed key layout, but the actual keys have no number. Pressing the ◇ key enables another 70 PLUs assignment.*

2. The functions of the (3) and (4) keys can be changed according to the initial settings as follows.

Initial Setting #			Speed key #	
SL-9000	SL-9000N	SL-9000/9000N		
8-7	28-4	12-8	69 (4)	70 (3)
0	0	0	Speed key #69	Speed key #70
0	0	1	Speed key #69	AUTO/MANUAL key
1	1	0	Speed key #69	Tare % key
1	1	1	AUTO/MANUAL key	Tare % key

■ Operation Keyboard Function

Name of Key	Function
0 to 9	Enters PLU #, unit price and tare weight.
C	1. Clears numeric entries. 2. Releases the scale from error mode. 3. Releases the scale from SAVE mode.
T	Subtracts tare.
PLU	Calls a PLU or clears displayed PLU.

■ Operation Keyboard Function

Name of Key	Function
PRT/*	Prints the customer label.
SAVE	Saves tare and unit price after taking off the commodity from a platter.
FOR	Sets the number of articles in “BY COUNT” mode.
DT/TM	Displays the date.
NEXT PLU	Selects the item for change Print/OFF.
VOID	Corrects data just after the registration.
◇	1. Selects the speed key page. 2. Selects the function for change Print/OFF.
ESC.	Returns to the main menu.
PROG.	Accesses print item, auto message timer, print format and issue mode selection mode.
POWER	Turns the display on/off when the scale power is on.
1/2 1/4	Changes between 1/2 lb and 1/4 lb (US type only).
100g	Changes the unit of measure to 100 g (CA type only).
LB/kg	Changes the unit of measure between lb and kg (CA type only).
PRESET COUNT	Sets the number of labels to print.
GRADE LINE	Prints a grade line.
LOGO	Calls the logo.
GROUP #	No function.
ST	No function

■ Operation Keyboard Function

Name of Key	Function
%	This key is used for item or subtotal discount by entering a percentage. (Optional key by initial setting)
FEED	Feeds the label.
TEST	Issues a test label.
ZERO	Adjusts the zero point.
AUTO/ MANUAL	Changes the label issue mode between Automatic issue and manual issue. (Optional key by initial setting)
1 to 70	Calls the PLU frequently used.

5.3 SELF SERVICE KEYBOARD

1 PUSH	2 PUSH	3 PUSH	X	X	X	X
			X	X	X	X
4 PUSH	5 PUSH	6 PUSH	X	X	X	X
			X	X	X	X
7 PUSH	8 PUSH	9 PUSH	X	X	X	X
			X	X	X	X
C PUSH	0 PUSH	PLU PUSH	PRINT PUSH		X	ZERO
					X	FEED

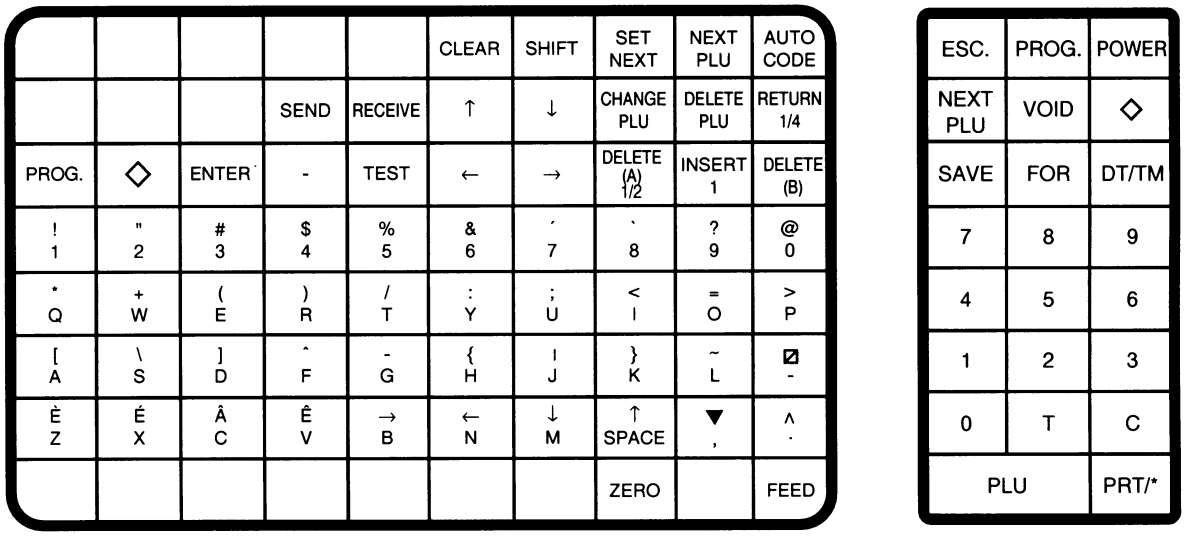
ESC.	X	POWER
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X		X

NOTES: *1. When using the self service keyboard, set the initial setting #13-2 to 1.*

2. The above X columns indicate No Function.

3. The [ESC.] Key is available while scanning.

(For Programming/Unit-Price Change/Read Reset/Security)



					CLEAR	SHIFT	SET NEXT	NEXT PLU	AUTO CODE
			SEND	RECEIVE	↑	↓	CHANGE PLU	DELETE PLU	RETURN 1/4
PROG.	◇	ENTER	-	TEST	←	→	DELETE (A) 1/2	INSERT 1	DELETE (B)
! 1	" 2	# 3	$ 4	% 5	& 6	´ 7	` 8	? 9	@ 0
* Q	+ W	(E	) R	/ T	: Y	; U	< I	= O	> P
[A	\ S	] D	^ F	- G	{ H	| J	} K	~ L	☒ -
È Z	É X	Â C	Ê V	→ B	← N	↓ M	↑ SPACE	▼ ,	^ .
							ZERO		FEED

ESC.	PROG.	POWER
NEXT PLU	VOID	◇
SAVE	FOR	DT/TM
7	8	9
4	5	6
1	2	3
0	T	C
PLU		PRT/*

Speed key can operate among unit-price change (prog-mod), read/reset-mode, security-mode.

Of course panel-key can operate, those panel key don't indicate top of key-sheet.

Unit-Price Change			Read/Reset			Security		
(left side key)		(right side key)	(left side key)		(right side key)	(left side key)		(right side key)
PROG.	=	PROG.	◇	=	◇	◇	=	◇
0 ~ 9	=	0 ~ 9	0 ~ 9	=	0 ~ 9	0 ~ 9	=	0 ~ 9
◇	=	◇	NEXT PLU	=	FOR	CLEAR	=	C
ENTER	=	PRT/*	ENTER	=	PRT/*	ENTER	=	PRT/*
CLEAR	=	C				NEXT PLU	=	NEXT PLU
-	=	VOID						
NEXT PLU	=	NEXT PLU						
TEST	=	TEST						

NOTE: *If you would like to switch the initial setting #13-2 to 1 please contact your authorized TOSHIBA TEC representative.*

6. PROCEDURE BEFORE OPERATION

6. PROCEDURE BEFORE OPERATION

1. Unpack the accessories and scale from the carton.
2. Install the remote unit on the scale. (See Page 7-1.)
3. Refer to Safety Precautions in this manual and set up the scale at a proper location.
4. Load the Label or Receipt. (See Page 9-1.)
5. Be sure to insert the Power Cord Plug into an AC outlet.
6. Adjust the Level Gauge. (See page 8-1.)
7. Connect a PC-AT Keyboard if necessary.
8. Turn the power on and then press the power key. (See page 10-1.)
9. Set the following program menu:

Menu Page	ITEM No.	Programming Name
2	0	PRINT FORMAT
2	1	DATE/TIME SETTING
1	1	PLU DATA SETTING

If necessary, set the following program menu:

Menu Page	ITEM No.	Programming Name
1	2	INGREDIENT MESSAGE
1	3	NUTRITION SETTING
1	5	ADDRESS AND COMMECIAL MESSAGE SETTING
1	7	SPECIAL INFORMATION
1	8	GRADE LINE
1	9	SPEED KEY SET

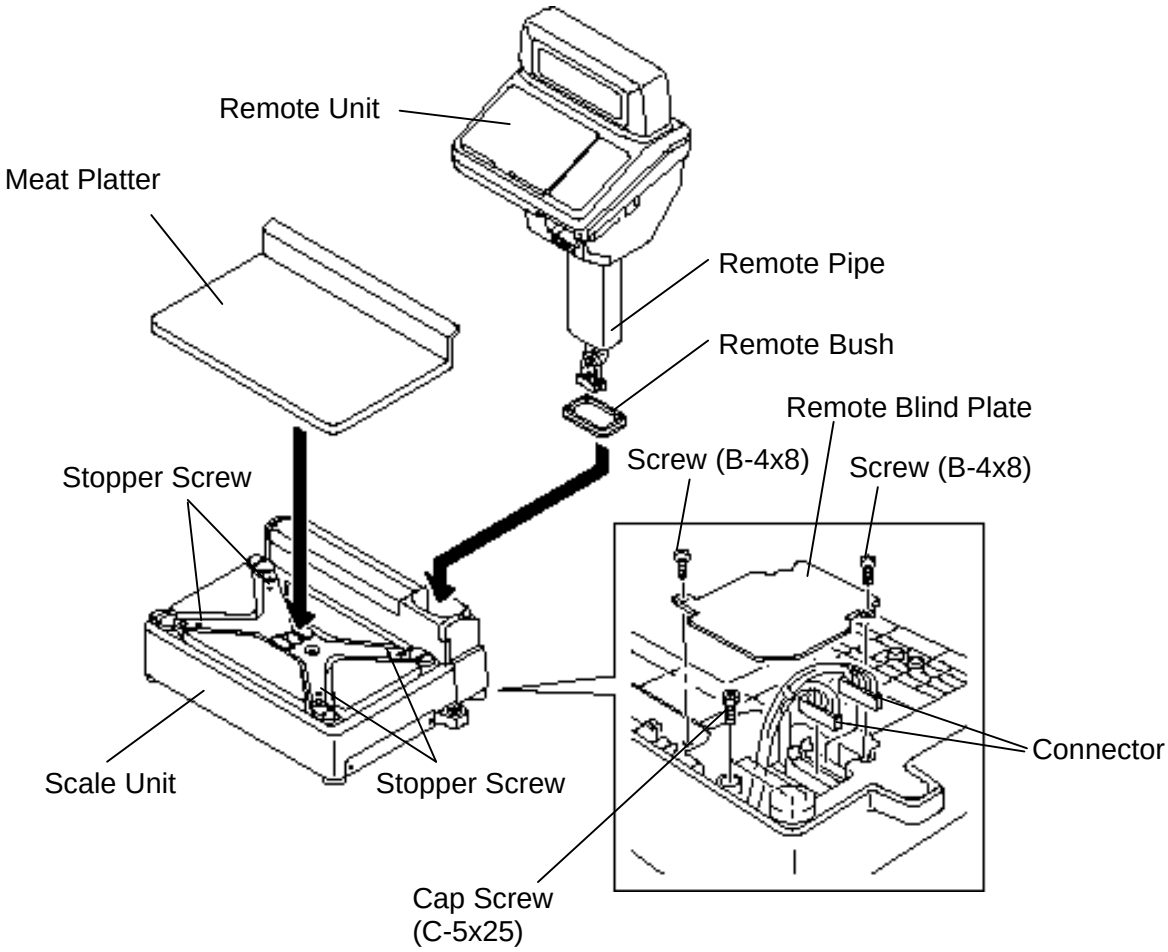
10. Call a PLU which contains the unit price used in weighing mode, then place a weight on the platter and check a correct price is displayed.
11. Label issued is ready.

7. INSTALLATION PROCEDURE

7. INSTALLATION PROCEDURE

> ***CAUTION:*** *Never place the scale upside down. Doing so will cause an error in weigh operation.*

1. Insert the attached remote bush into the remote pipe and push it up until it will go no further.
2. Assemble the remote unit and secure it using the four cap screws (C-5x25).
3. Insert two connectors into the scale unit.
4. Secure the remote blind plate using the two screws (B-4x8).
5. Attach the meat platter.

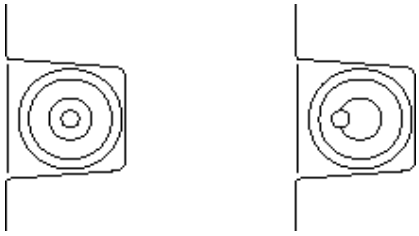


NOTE: *Care must be taken when handling the remote unit because of the display tube and PC board installed in it.*

8. LEVEL ADJUSTMENT

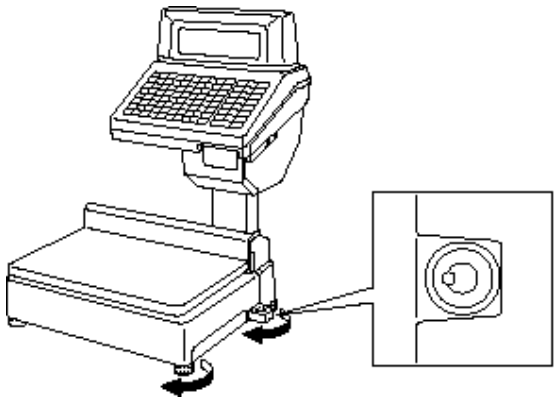
8. LEVEL ADJUSTMENT

1. Level Gauge
   Set the scale on a stable and level surface. Level the scale by turning the adjustable legs so that the air bubble is inside the center circle.

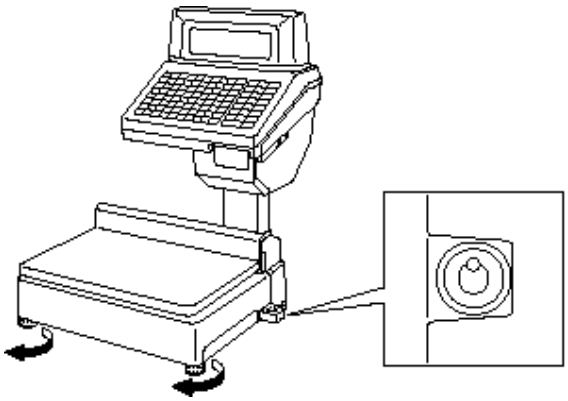


Correct Incorrect

2. Adjustment Procedure
   ① When the air bubble moves toward the left side, turn the right adjustable legs clockwise.



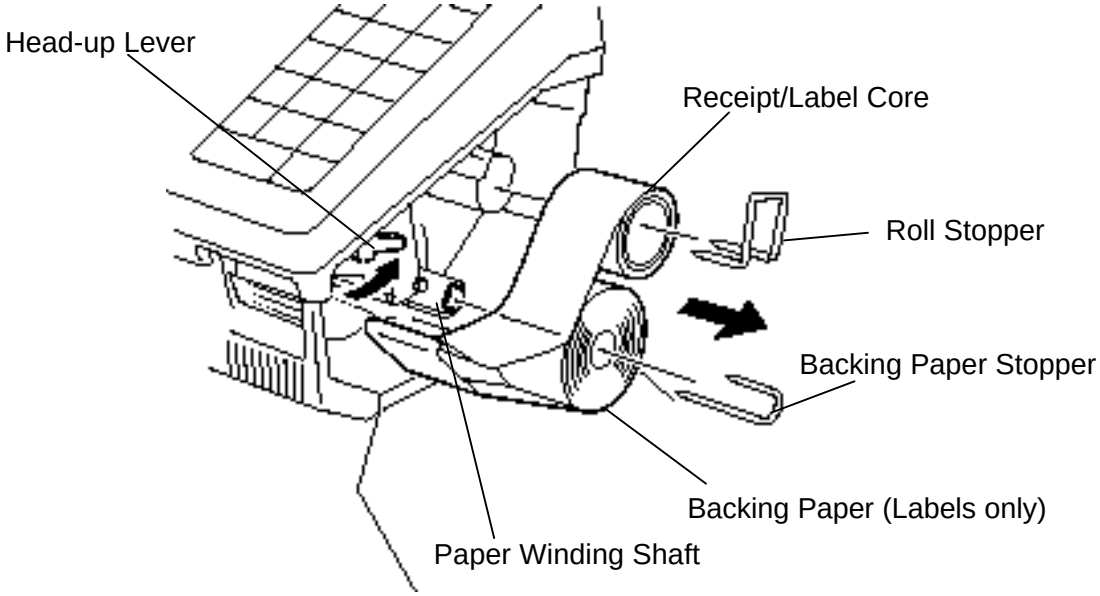
   ② When the air bubble moves toward rear, turn the front adjustable legs clockwise.



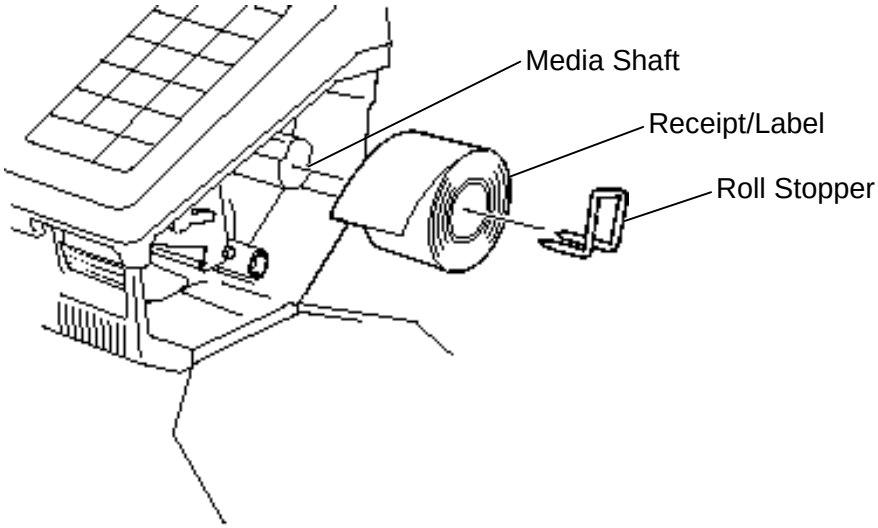
9. REMOVAL AND REPLACEMENT OF MEDIA

9. REMOVAL AND REPLACEMENT OF MEDIA

1. Open the printer cover and turn the head-up lever to the right.
2. Pull out the roll stopper and backing paper stopper, then remove the receipt/label core with the backing paper. You can loosen the backing paper by turing the paper winding shaft anti-clockwise.

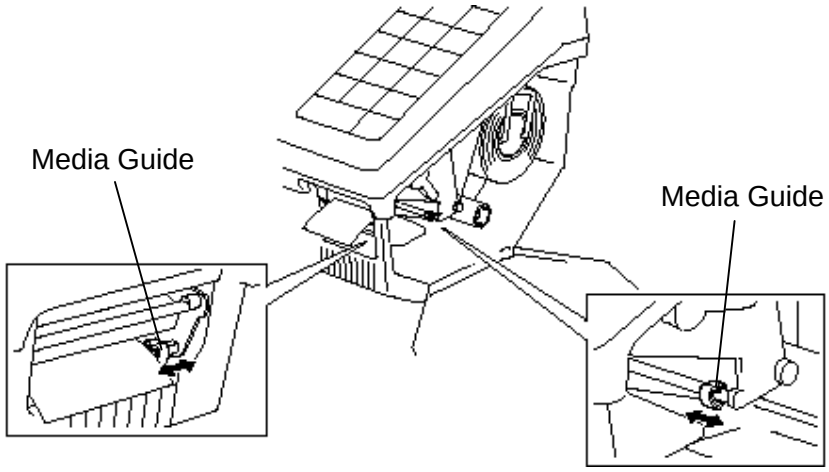


3. Put a new receipt/label roll over the media shaft and fix it with the roll stopper.



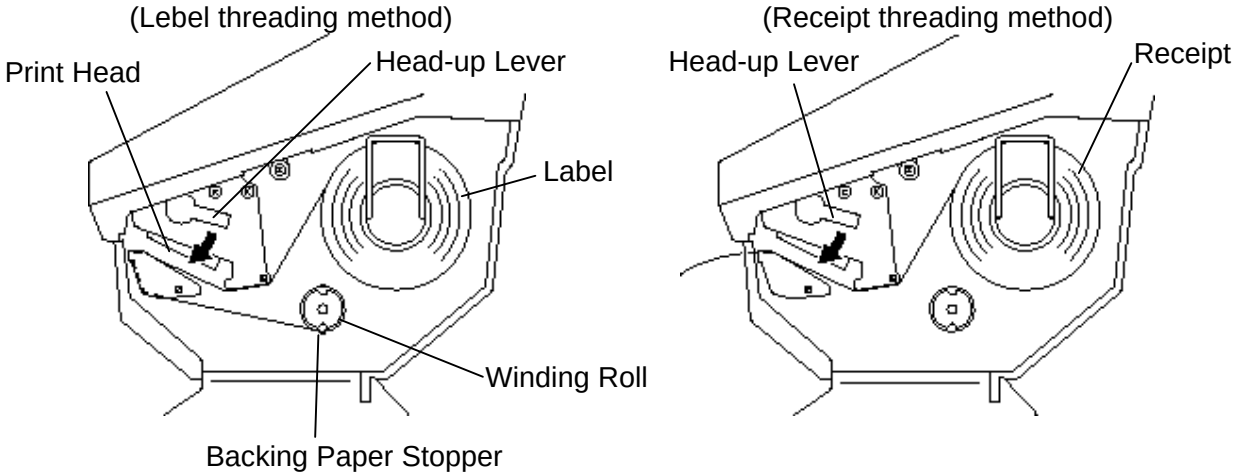
9. REMOVAL AND REPLACEMENT OF MEDIA

4. Insert the tip of the receipt/label into the print head.
5. Align the two media guides with the right edge of the receipt/label.



6. Thread the receipt/label as shown below.
   When using a label roll, take up the backing paper onto the winding roll and fix it with the backing paper stopper.

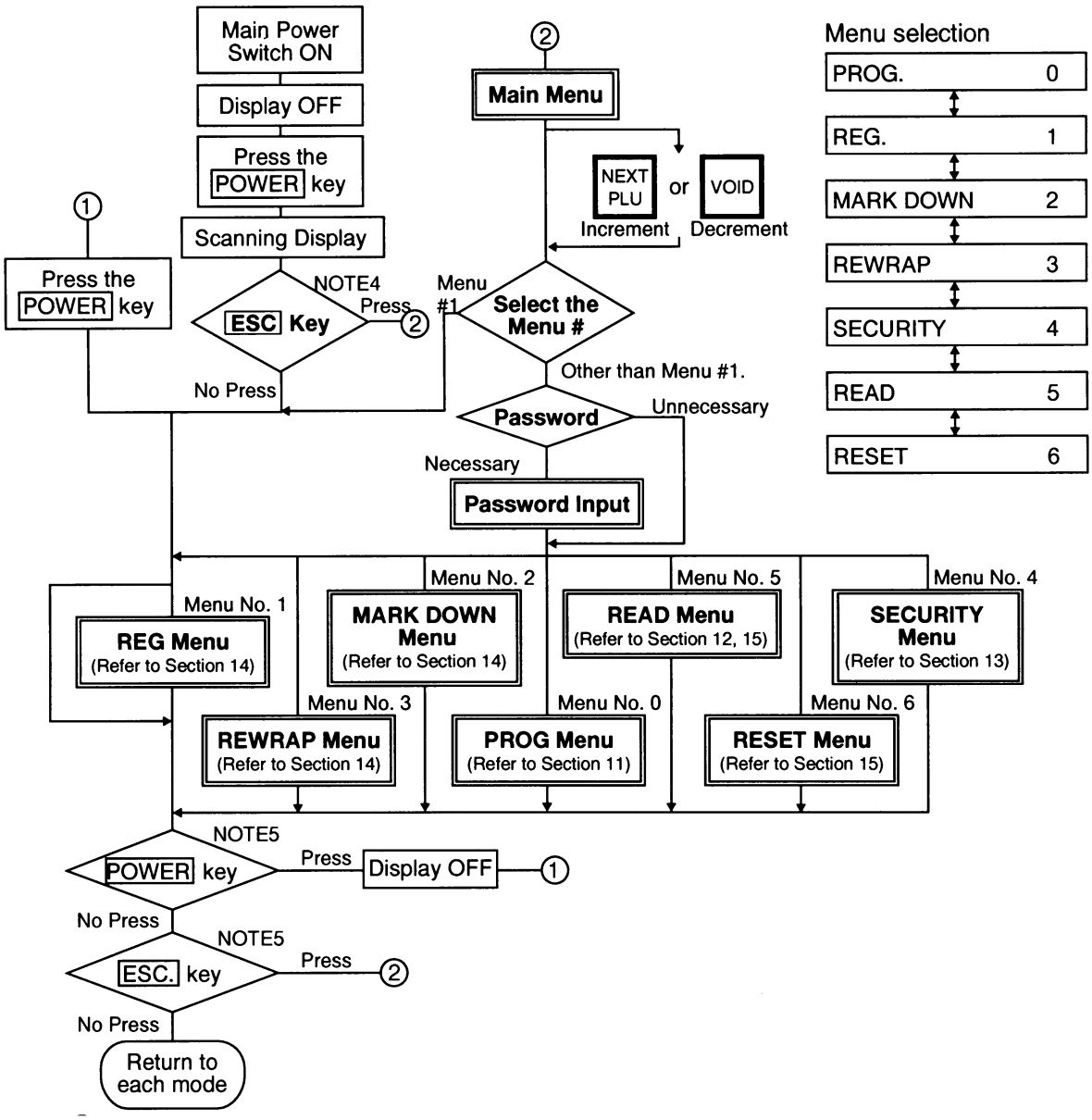
   NOTE: *Labels and receipts should be left-aligned as viewed from the front of the machine, and always threaded in parallel with the media shaft and the print head. Failure to do this may cause a paper jam or a skew feed.*
7. Turn the head-up lever to the arrow indicating direction to set the print head in position.



8. Close the printer cover.
9. Finally press the Feed key to confirm that the labels/receipts are loaded correctly.

10. OUTLINE OF OPERATION

10. OUTLINE OF OPERATION



NOTES:

1. *You can register a password to avoid unauthorized access to each menu except for REG. menu.*
2. *To avoid unneeded use of the display, press the POWER key to turn the display off while being unused. Pressing the POWER key again allows you to enter REG mode without scanning.*
3. *Refer to respective sections for explanation of each menu enclosed by a double rectangle.*
4. *In the self service scale mode (the initial setting #13-2 is set to 1) the POWER , and ESC. Keys are available in the following cases.*
   POWER key: Available after the main power switch turns ON.
   ESC. Key: Available after the POWER key is depressed while scaling.
5. *In the self service scale mode (the initial setting #13-2 is set to 1), these keys are unavailable.*
   If you would like to switch the initial setting #13-2 to 1, please contact your authorized TOSHIBA TEC representative.

10. OUTLINE OF OPERATION

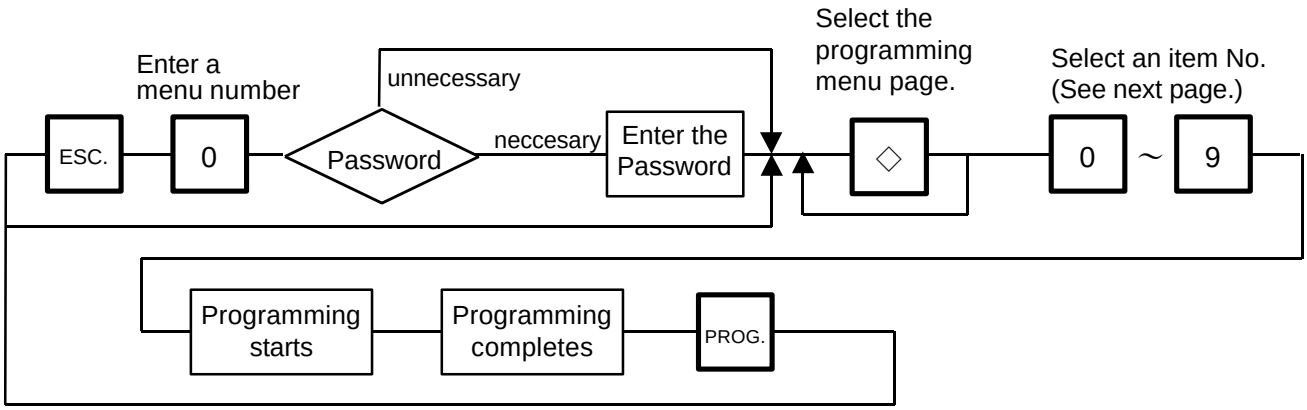
■ Registration mode

O: AVAILABLE x:NOT AVAILABLE

No.	FUNCTION	WEIGH	BY COUNT	FIX PRICE	SELF SERVICE
1	ZERO SETTING	o	x	o	o
2	LABEL FEED	o	o	o	o
3	CALL PLU BY SPEED KEY	o	o	o	x
4	CALL PLU BY PLU KEY	o	o	o	o
5	RETURN TO PLU CALLING MODE	o	o	o	o
7	TEMPORARY CHANGE OF DATE	o	x	o	x
8	TARE CLEAR	o	x	o	x
9	PRESET TARE 1	o	x	o	x
10	PRESET TARE 2	o	x	o	x
11	DIRECT TARE	o	x	o	x
12	SAVE UNIT PRICE	o	x	o	x
13	SAVE TARE	o	x	o	x
14	TEST PRINT	o	o	o	x
15	MANUAL ISSUE WITH WEIGHING	o	x	o	x
16	VOID REGISTRATION	o	o	o	x
17	AUTO ISSUE WITH WEIGHING	o	x	o	x
18	1/2, 1/4LB KEY	o	x	x	x
19	100g, kg KEY	o	x	x	x
20	LB/kg KEY	o	x	x	x
21	CHANGE PRINT/OFF	o	o	o	x
22	BY COUNT (FIX PRICE)	x	o	x	o
23	BY COUNT (PRICE/PIECES)	x	o	x	x
24	BY COUNT (SPLIT PRICE)	x	o	x	x
25	COUNT PRESET	o	o	o	x
26	NET WT. STATEMENT	x	x	o	x
27	CALL LOGO	o	o	o	x
28	CALL DEPT.#	o	o	o	x
29	CALL GRADE LINE	o	o	o	x
30	OPEN PLU	o	o	o	o
31	AUTO CLEAR	o	x	o/x	o
32	FLOATING VENDOR	o	o	o	x
33	% TARE	o	x	x	x
34	BATCH PRINTING	x	o	o/x	x
35	VISUAL COMMODITY LIBRARY	o	o	o	x
36	TMCC (CMT-port) communicarion	o	o	o	o
37	Clerk Label	o	o	o	x

11. PROGRAMMING PROCEDURES

■ How to access to Programming Menu



NOTES: *1. When the selected menu (0) is protected from an access, refer to Section 13.2 and enter the password.*

2. In Section 11.1, 11.2 and 11.3, items which have been sold on that day cannot be called before resetting (refer to Section 15.) unless Initial Set #1-4 is set to 1.

<Menu> PROG.1

0. PLU DATA EDIT
1. PLU DATA
2. INGREDIENT
3. NUTRITION
4. CONFIRMATION LABEL
5. MESSAGE
6. MSG. COMBINATION
7. SPECIAL INFO
8. GRADE LINE
9. SPEED KEY SET

<Menu> PROG.2

0. PRT LOCATION
1. DATE TIME
2. CMT
3. ON-LINE/LOCAL
4. LON SYSTEM
5. INITIAL SET
6. BAR CODE FORMAT
7. TITLE
8. LOGO
9. IDIOM

<Menu> PROG.3

0. VENDOR
1. FREE FORMAT
2. LAN SYSTEM (SL-9000N only)

■ Title and Contents of Programming Menu

Table 1.

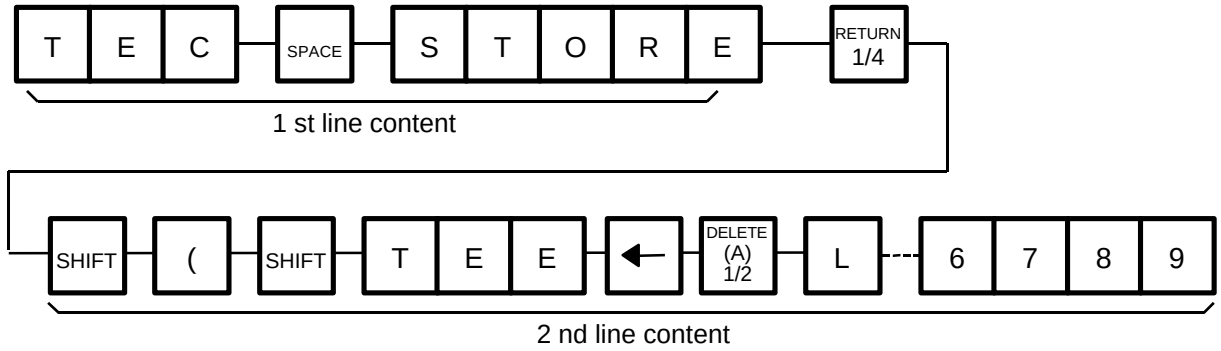
NO.	TITLE	MENU PAGE	ITEM NO.	CONTENTS	Page
1	PLU DATA EDIT	1	0	CHANGE UNIT PRICE	11-4
2	PLU DATA	1	1	PROGRAM/CHANGE/DELETE PLU	11-5
3	INGREDIENT MESSAGE	1	2	PROGRAM/CHANGE INGREDIENT	11-7
4	NUTRITION SETTING	1	3	PROGRAM/CHANGE NUTRITION FACTS TABLE	11-8
5	CONFIRMATION LABEL	1	4	VERIFY THE PROGRAMMING DATA OF PLU	11-12
6	ADDRESS OR MESSAGE SETTING	1	5	PROGRAM MESSAGE/ADDRESS	11-13
7	COMBINATION MESSAGE	1	6	PROGRAM MESSAGE ON DISPLAY AND TIME	11-14
8	SPECIAL INFO.	1	7	PROGRAM SPECIAL INFORMATION	11-16
9	GRADE LINE	1	8	PROGRAM GRADE LINE	11-16
10	SPEED KEY SETTING	1	9	ASSIGN COMMON PLU TO SPECIFIC SPEED KEY	11-17
11	PRT LOCATION	2	0	SELECT LABEL FORMAT AND ADJUST	11-18
12	DATE/TIME SETTING	2	1	PROGRAM DATE/TIME/MACHINE #/STORE CODE	11-20
13	CMT/PL-3	2	2	BACK-UP/LOAD DATA OF PLU/ING/NUTRI./SPEED KEY	11-20
14	IN-LINE/LOCAL	2	3	SET PARAMETERS FOR TMCC	11-23
15	LON SYSTEM	2	4	SET PARAMETERS FOR LON	11-24
16	INITIAL SET	2	5	SET INITIAL PARAMETERS	-----
17	BAR CODE FORMAT	2	6	PROGRAM BARCODE FORMAT	11-26
18	TITLE	2	7	PROGRAM/CHANGE TITLE ON DISPLAY/PRINT	11-28
19	LOGO	2	8	SEND/RECEIVE LOGO DATA	11-29
20	IDIOM	2	9	PROGRAM IDIOM	11-30
21	VENDOR	3	0	VENDOR NAME	11-30
22	FREE FORMAT	3	1	PROGRAM FREE FORMAT	11-31
23	LAN SYSTEM (SL-9000N only)	3	2	PROGRAMS PARAMETERS FOR LAN	-----

NOTE: *Menu No. 16 and 23 are programs for use of dealers. Contact a TOSHIBA TEC representative if you desire to use them. When you enter one of these menus by mistake, press* ***[ESC.] key*** *to return to Main Menu.*

■ How to enter characters

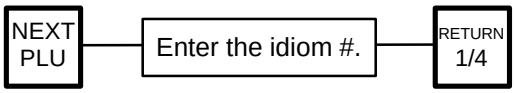
Use the following procedure to enter a commodity name, address and ingredient message.

Example) 1 st line: TEC STORE
2 nd line: (TEL) 0123-45-6789

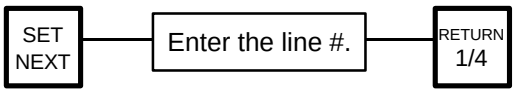


NOTES:

1. *[←] keys [→] are the cursor keys.*
2. *To insert a space, move the cursor to the next character to the space to be inserted, and press [INSERT] key.*
3. *To delete a line, press [DELETE (B)] key.*
4. *To move the cursor to the preceding line, press [−] key, or [↑] key when entering a commodity name.*
5. *Pressing the [◇] key toggles between capitals and small letter.*
6. *When entering a commodity name, press [ENTER] or [↓] key instead of the [RETURN 1/4] key to return.*
7. *Pressing the [CHANGE PLU] key toggles the type font between normal and boldface.*
8. *To call a preset ingredient message idiom, follow the procedure below:*



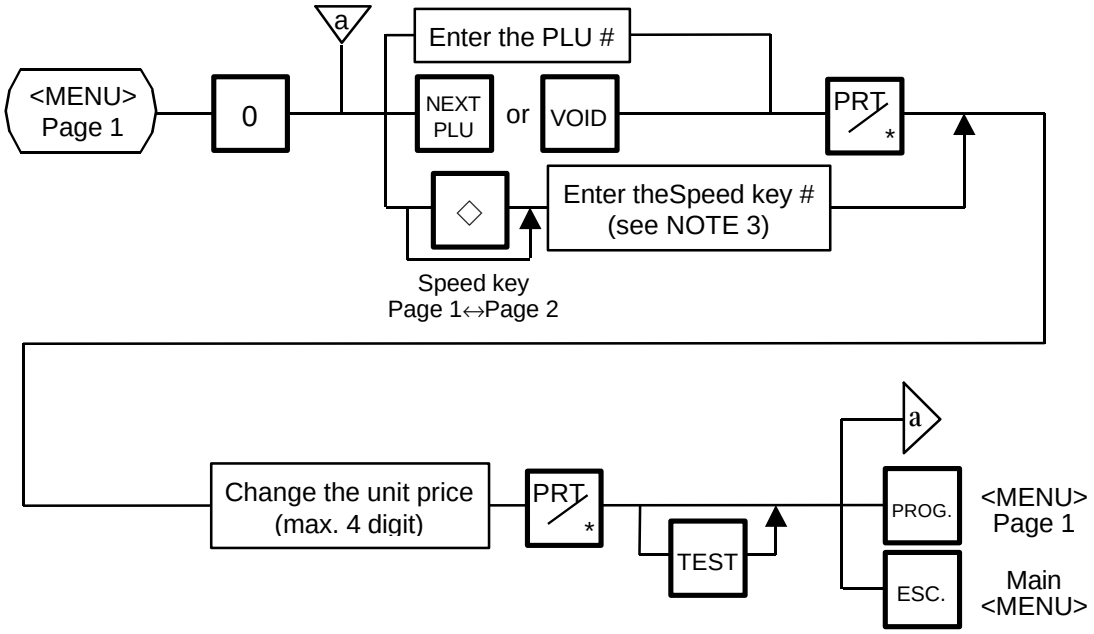
9. *To skip a line when entering an ingredient message, follow the procedure below:*



11.1 PLU DATA EDIT

Menu Page: 1
Item No.: 0

In this procedure, use operation keys (except when calling a PLU by using a speed key).
The unit price stored in a PLU can be changed with this menu.

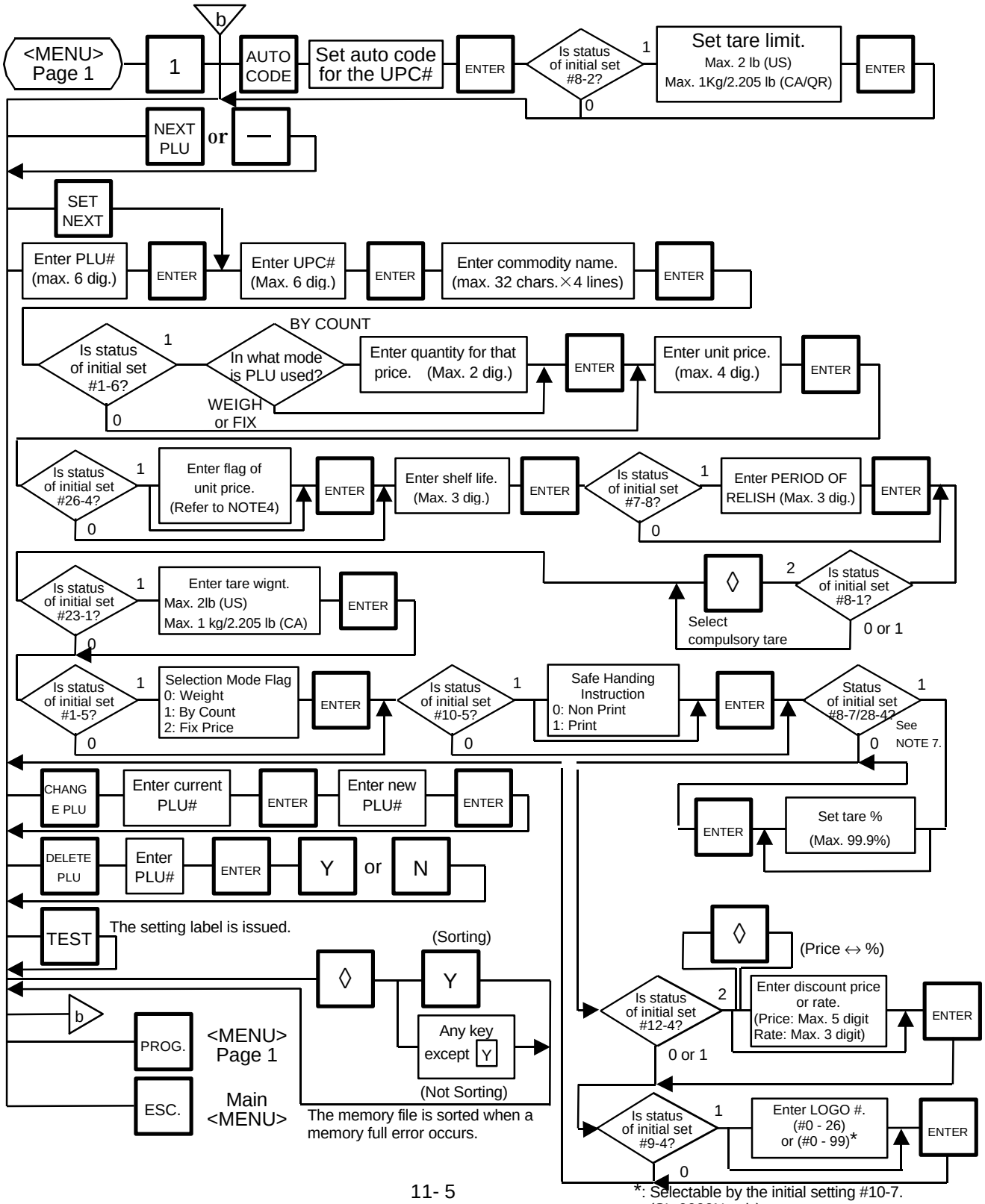


NOTES: *1. An attempt to call a PLU # that has not been stored in the PLU file results in an error.*
2. Under this Menu (Menu No. 0), "open-price" PLU's price cannot be changed.
3. In the self service scale mode (the initial setting #13-2 is set to 1), any PLU cannot be called by using the speed key.

11.2 PLU DATA SETTING

Menu Page: 1
Item No.: 1

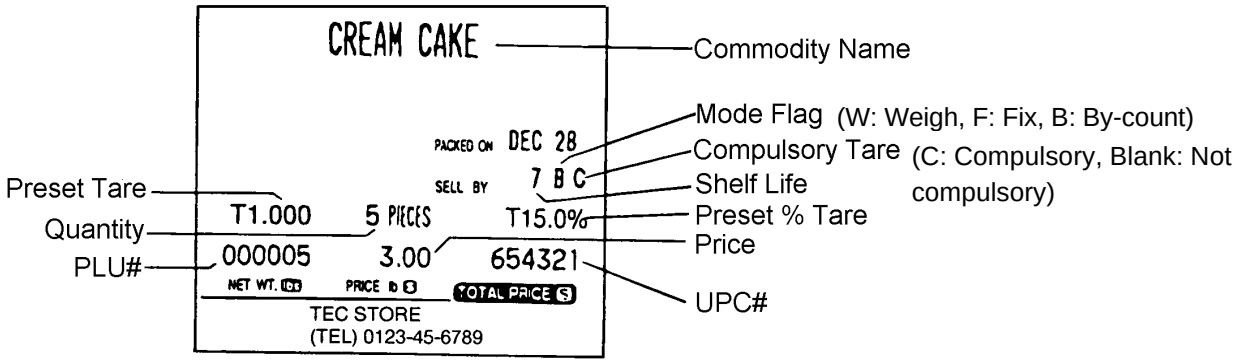
Setting or changing the contents of PLU (PLU#, UPC#, Commodity Name, etc).



*: Selectable by the initial setting #10-7. (SL-9000N only)

Pressing the [↓] key instead of the [ENTER] key advances to the next menu. Pressing the [↑] key returns to the preceding menu.

Verification label of PLU data



NOTES:

1. *A UPC code is made up of a combination of an entered code and an AUTO CODE. Be sure to attach some [-] characters to the end of the AUTO CODE, or all entered codes will be ignored and an AUTO CODE will become an UPC code (see ex. 1).*

   ex. 1) enter code: 456 ex. 2) enter code: 4567 ex. 3) enter code: 123456
   AUTO CODE: 123--- AUTO CODE: 123--- AUTO CODE: 987
   ↓ ↓ ↓
   code#: 123456 code#: 123567 code#: 987

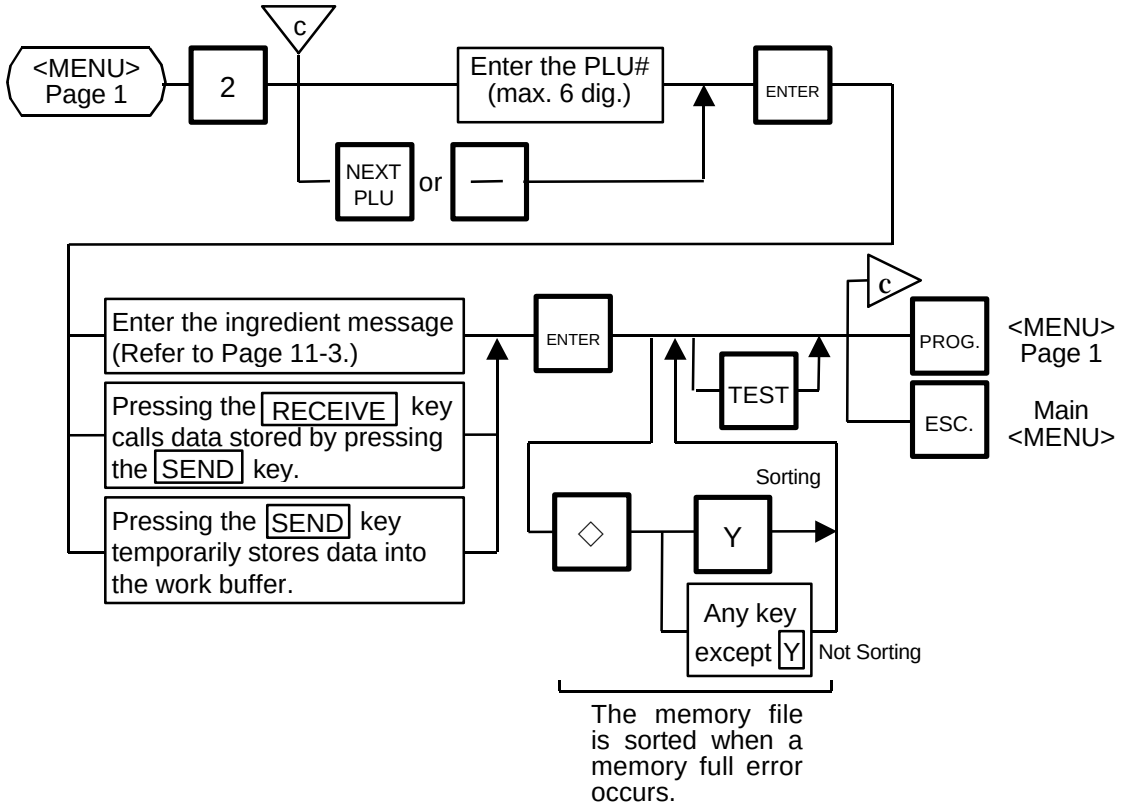
2. *When there is no area to store PLU data, an error occurs when pressing the [ENTER] key.*
3. *Changing a PLU # to the number to which other PLU data is set will result in an error.*
4. *Unit price flag may be selected as follows:*
   1) *In case of lb scale*
      a. [INSERT 1] *key : $ per lb*
      b. [DELETE (A) 1/2] *key : $ per 1/2 lb*
      c. [RETURN 1/4] *key : $ per 1/4 lb*

   2) *In case of kg scale*
      a. [INSERT 1] *key : $ per 100 g or Kg*
5. *Tare limit should be a multiple of 5, up to 2.000 lb for US type and a multiple of 2, up to 1.000 Kg for CA/QR type.*
6. *Safe handling instructions can be printed on 57-mm wide labels only. Safe handling instructions are printed on labels formatted for ingredient messages. Only ingredient message labels with 13 or more lines can be used to print safe handling instructions. Available print formats are as follows:*
   13 (63), 15 (65), 16 (66), 23 (73), 25 (75), 26 (76), 33 (83), 35 (85), 36 (86), 41, 42, 43, 48 and 49.
7. *Tare % indicates a percentage of tare in gross weight, which is available when the initial Setting #8-7 is set to 1 (SL-9000) or #28-4 is set to 1 (SL-9000N).*
8. *When setting open prices in the count mode (Initial Setting #1-6: 1), set zeros as quantity and unit price.*

11.3 INGREDIENT MESSAGE

Menu Page: 1
Item No.: 2

Ingredient messages can be printed on a label with a maximum of 54 characters per line using small letters or 32 characters per line using boldfaced small letters. Will print up to 38 lines.

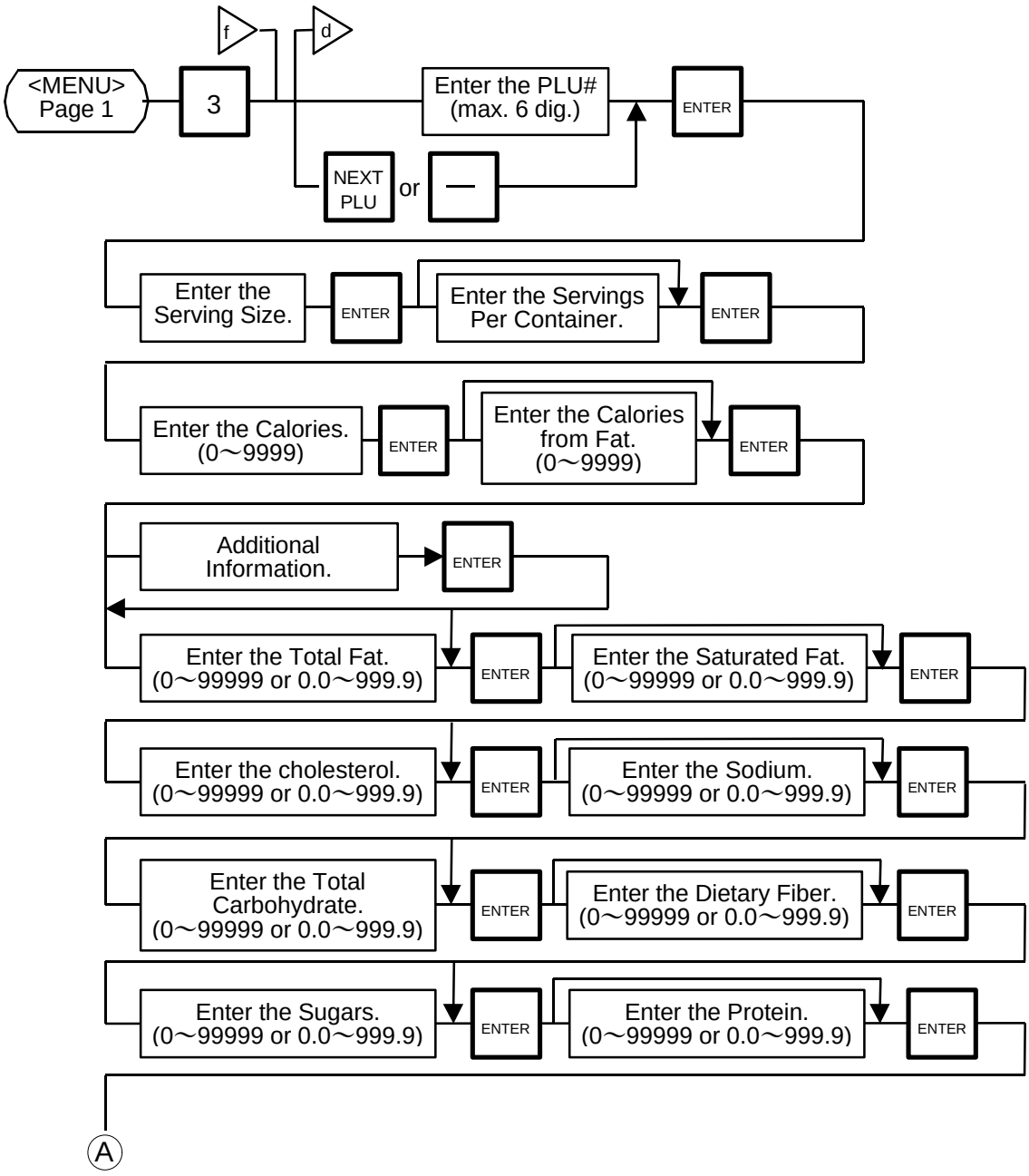


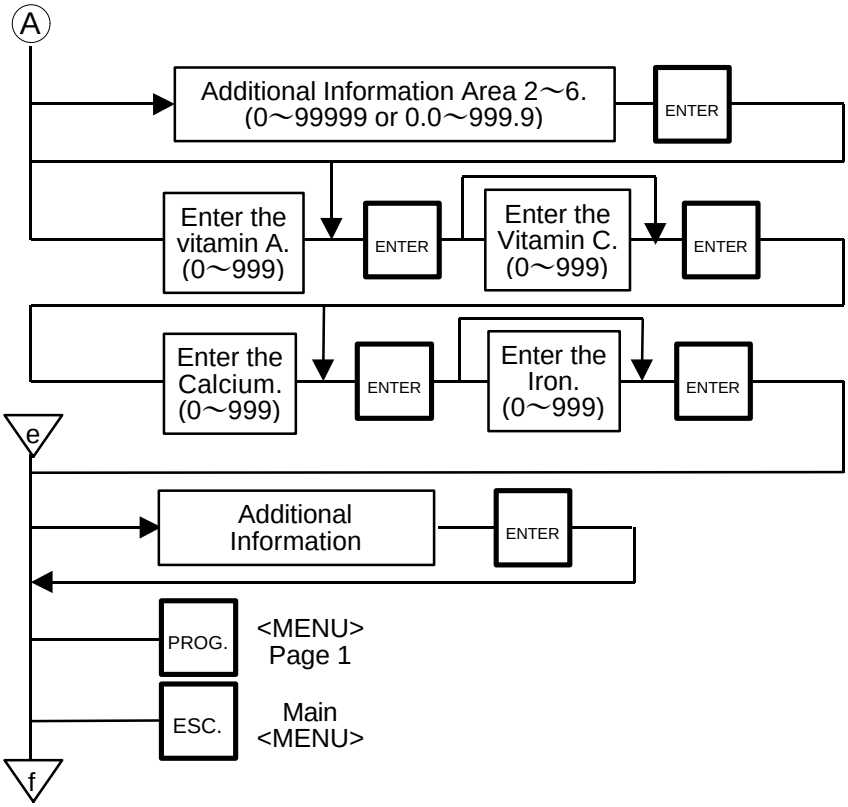
NOTES: *1. When no data is programmed for the PLU, ingredient cannot be set.*
2. When a selected PLU is not stored in the PLU file, a "PLU NOT FOUND" error occurs.
3. Once you exit this menu and enter again, data stored in the work buffer is cleared.
4. When there is no area to store ingredient data, a "MEMORY FULL" error occurs.
5. Different PLUs cannot use same the ingredient data. (PLU and ingredient data are in pairs.)

11.4 NUTRITION SETTING

Menu Page: 1
Item No.: 3

Using the following procedure, nutrition information and caloric intake can be set.
Serving Size and Servings Per Container consist of a maximum of a 18 characters. However, total number of characters including title characters must not exceed 30.

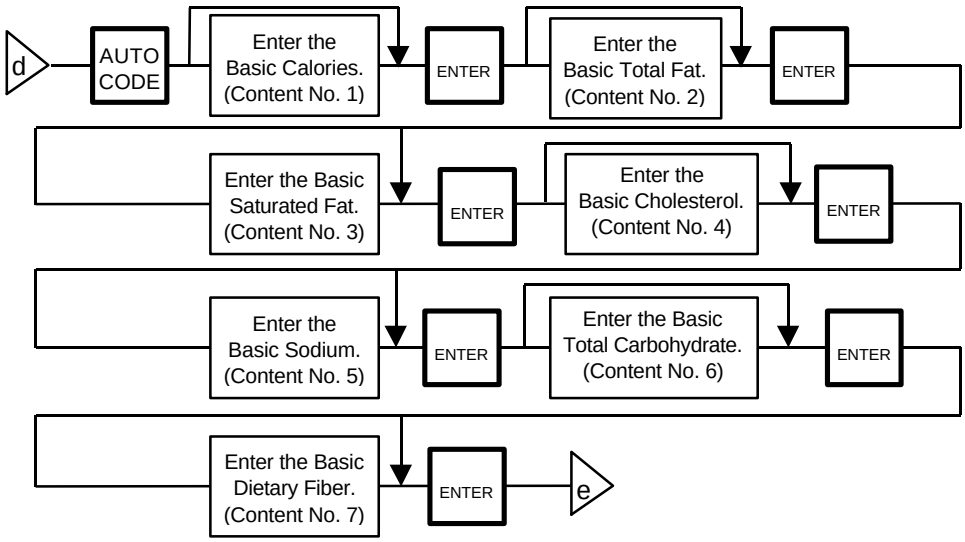




Pressing the ↓ key instead of the ENTER key advances to the next menu. Pressing the ↑ key returns to the preceding menu.

NOTES: *1. When entering PLU#, be careful of the following.*
When a selected PLU# is not stored in the PLU file, an error occurs.
2. Nutrition file is input each time the ENTER key is pressed. Thus, the if you quit the procedure on the way, data entered without pressing ENTER key is not stored.
3. The additional information can be used only when its title has been registered in Section 11.17.

● Set the Daily Value Table



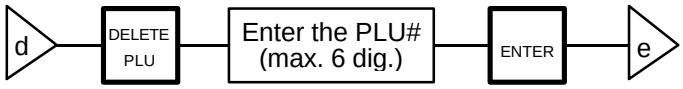
NOTES:

1. DAILY VALUE (Max. 8 digits)
   1) The contents of Daily value

Contents	upper 4 digits	lower 4 digits
No. 1	Percentage of necessary daily intake of Calories	Necessary daily intake of Calories
No. 2	Percentage of necessary daily intake of Total Fat	Necessary daily intake of Total Fat
No. 3	Percentage of necessary daily intake of Saturated Fat	Necessary daily intake of Saturated Fat
No. 4	Percentage of necessary daily intake of Cholesterol	Necessary daily intake of Cholesterol
No. 5	Percentage of necessary daily intake of Sodium	Necessary daily intake of Sodium
No. 6	Percentage of necessary daily intake of Total Carbohydrate	Necessary daily intake of Total Carbohydrate
No. 7	Percentage of necessary daily intake of Dietary Fiber	Necessary daily intake of Dietary Fiber

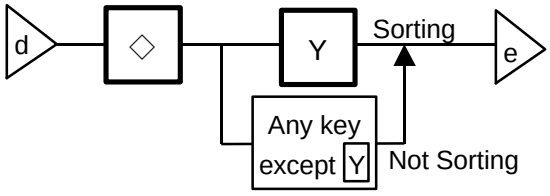
   2) The necessary daily intake of calories can be changed by changing the above table data, and percentage will be changed accordingly.
2. Percentage of daily intake
   1) Percentage data are printed in right justified 3 digits with zero suppression.
   2) Under the following conditions, an error occurs and data will be printed as ‘ ---% ’.
      ① Percentage data exceeds 3 digits (999 %).
      ② Data is entered improperly.
         Other than ××××× or ×××.×
         Other than numerals (0 to 9) and a point ‘ . ’
   3) Calculation
      (input data)/(necessary daily intake)×100
      = Percentage of daily value
      (round the obtained data to one decimal place)

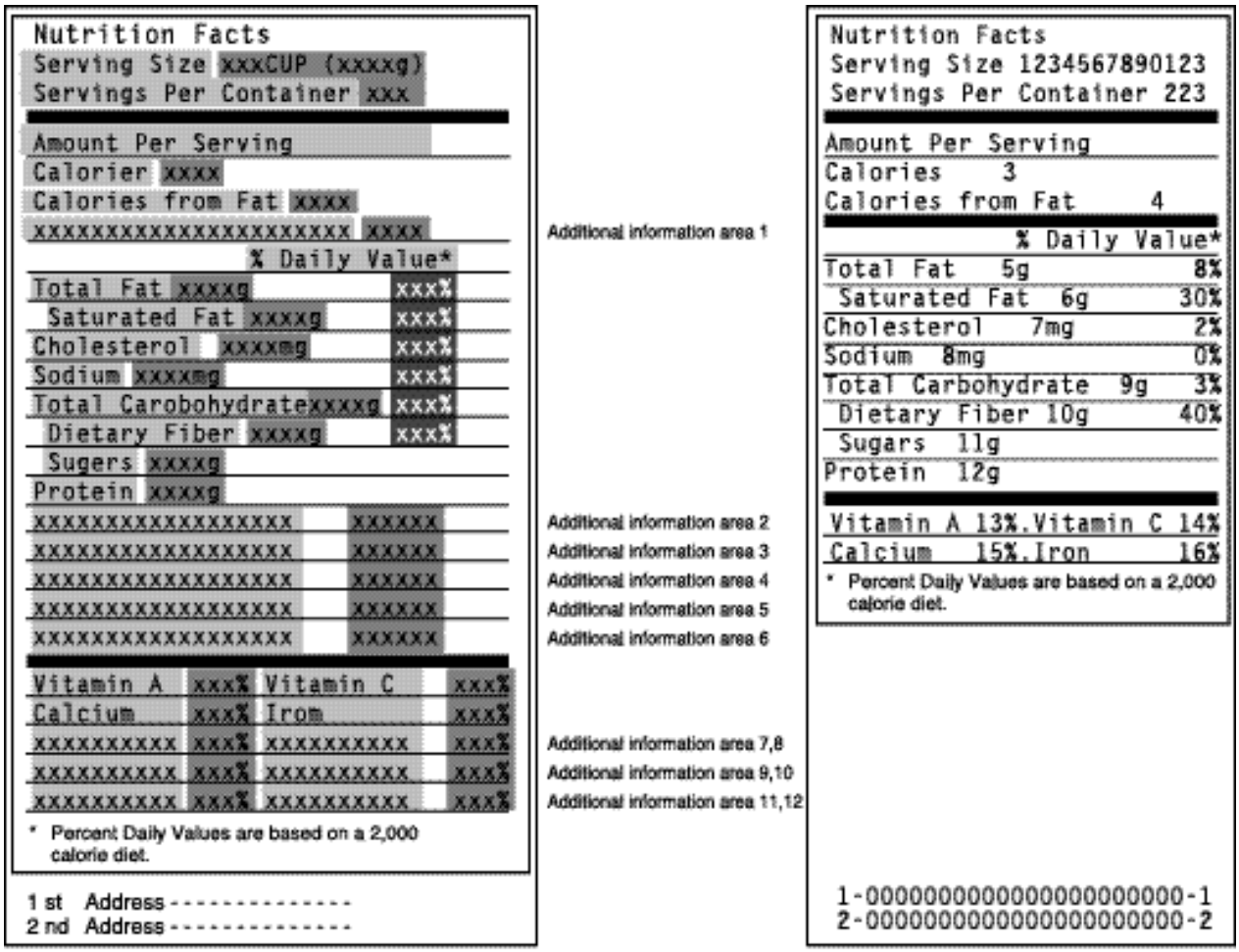
● Deleting Nutrition Data



● Memory file sort

The memory file is sorted when a memory full error occurs.




Nutrition Facts
Serving Size xxxCUP (xxxxg)
Servings Per Container xxx
Amount Per Serving
Calorier xxxx
Calories from Fat xxxx
xxxxxxxxxxxxxxxxxxxx xxxx
% Daily Value*
Total Fat xxxxg xxx%
Saturated Fat xxxxg xxx%
Cholesterol xxxxmg xxx%
Sodium xxxxmg xxx%
Total Carobohydratexxxxg xxx%
Dietary Fiber xxxxg xxx%
Sugers xxxxg
Protein xxxxg
xxxxxxxxxxxxxxxxx xxxxxx
xxxxxxxxxxxxxxxxx xxxxxx
xxxxxxxxxxxxxxxxx xxxxxx
xxxxxxxxxxxxxxxxx xxxxxx
xxxxxxxxxxxxxxxxx xxxxxx
Vitamin A xxx% Vitamin C xxx%
Calcium xxx% Irom xxx%
xxxxxxxxxx xxx% xxxxxxxxxx xxx%
xxxxxxxxxx xxx% xxxxxxxxxx xxx%
xxxxxxxxxx xxx% xxxxxxxxxx xxx%
* Percent Daily Values are based on a 2,000 calorie diet.
1 st Address - - - - - - - - - - - - - -
2 nd Address - - - - - - - - - - - - - -
Additional information area 1
Additional information area 2
Additional information area 3
Additional information area 4
Additional information area 5
Additional information area 6
Additional information area 7,8
Additional information area 9,10
Additional information area 11,12
Nutrition Facts
Serving Size 1234567890123
Servings Per Container 223
Amount Per Serving
Calories 3
Calories from Fat 4
% Daily Value*
Total Fat 5g 8%
Saturated Fat 6g 30%
Cholesterol 7mg 2%
Sodium 8mg 0%
Total Carbohydrate 9g 3%
Dietary Fiber 10g 40%
Sugars 11g
Protein 12g
Vitamin A 13%.Vitamin C 14%
Calcium 15%.Iron 16%
* Percent Daily Values are based on a 2,000 calorie diet.
1-00000000000000000000-1
2-00000000000000000000-2

Area for titles

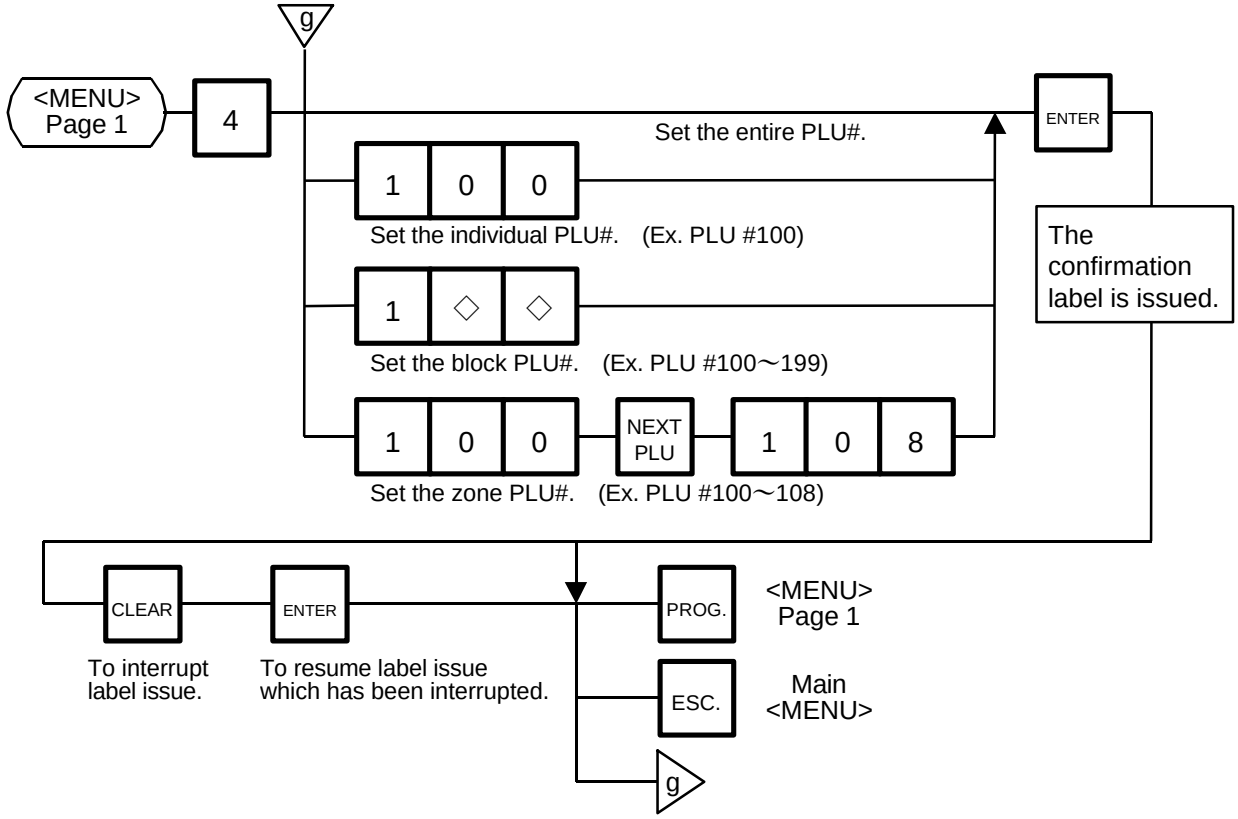
Area for entry data: Set in this menu (Nutrition Setting procedure.)

Area for data: Calculated on the basis of the entered data in Menu Page 1/Item No. 3

11.5 PLU VERIFYING LABEL

Menu Page: 1
Item No.: 4

Verifies PLU data stored in the scale.



NOTES:

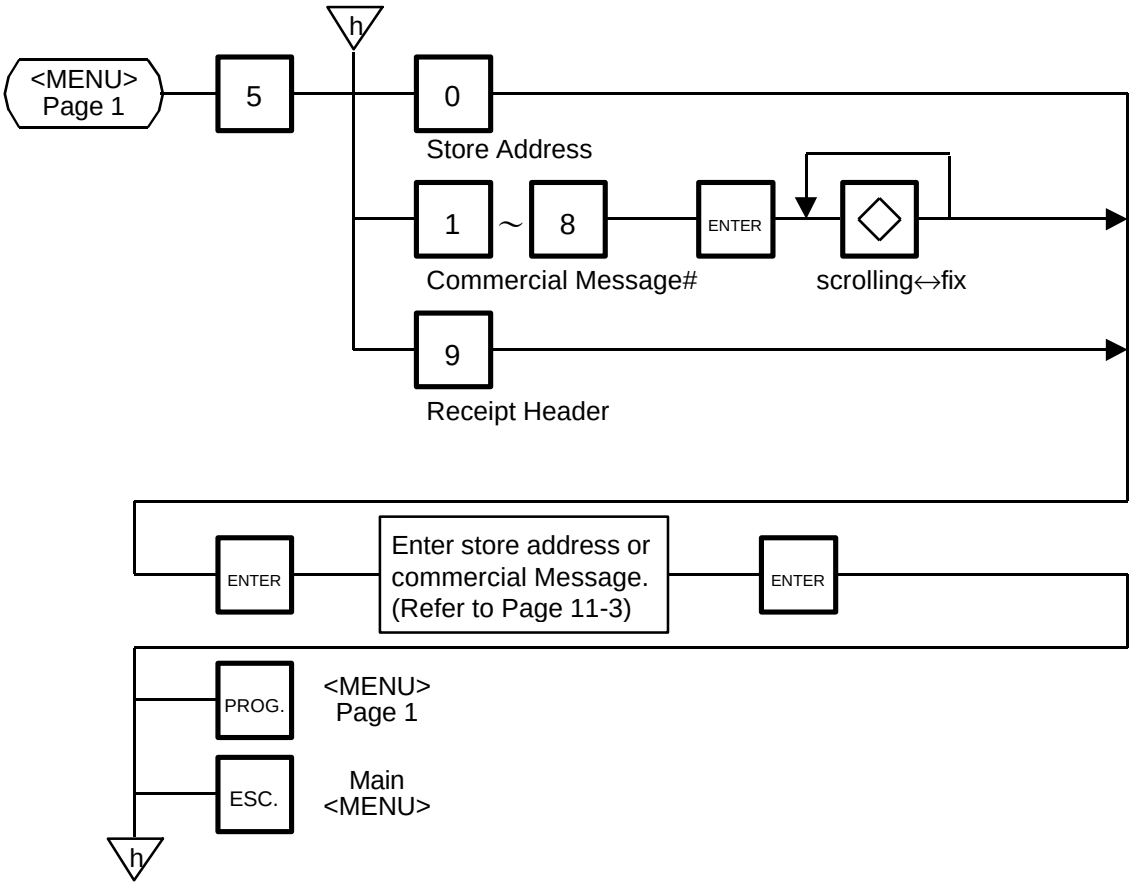
1. *Labels are printed in both batch mode and on-demand mode.*
2. *When no PLU is stored in the selected range, an error occurs when the* ENTER *key is pressed.*
3. *Pressing the* CLEAR *key releases the scale from the error mode and returns to the initial status of this menu.*
4. *After clearing a paper jam error, the scale will wait for an entry of PLU# again.*

11.6 ADDRESS AND COMMERCIAL MESSAGE SETTING

Menu Page: 1
Item No.: 5

A store address printed on label and a commercial message shown on the display can be set within the following character limits using the procedure below.

Address: 32 characters × 2 lines
Message: 90 characters
Receipt Header: 24 characters in the 1st/2nd line and 48 characters in the 3rd line



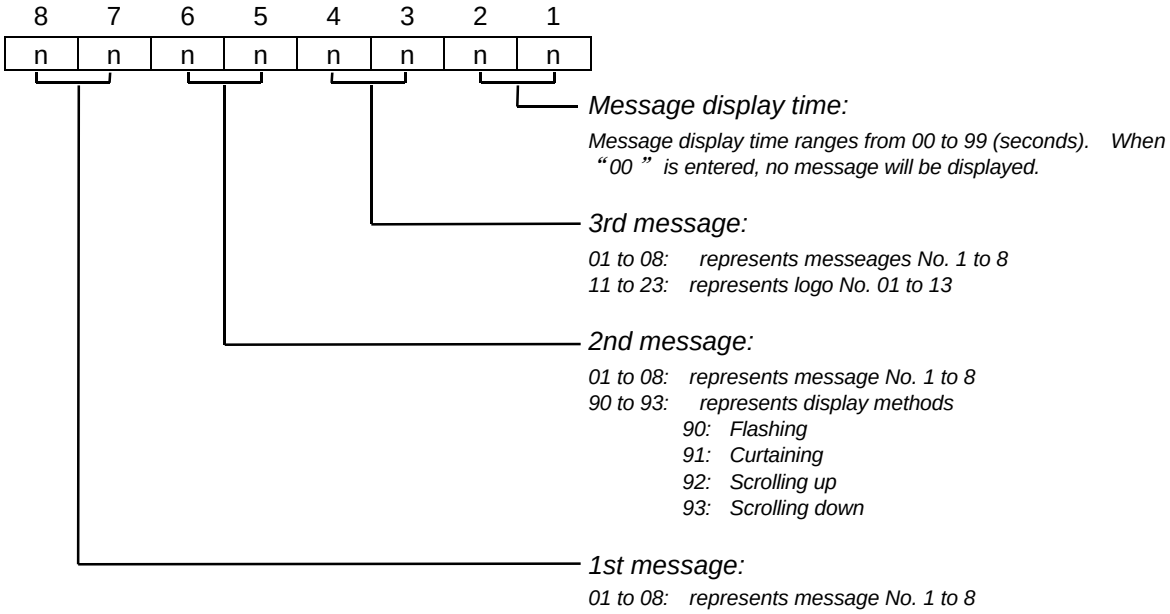
NOTE: *When the fixed message is selected, the first 16 characters will be indicated on the display.*

11.7 COMBINATION MESSAGE

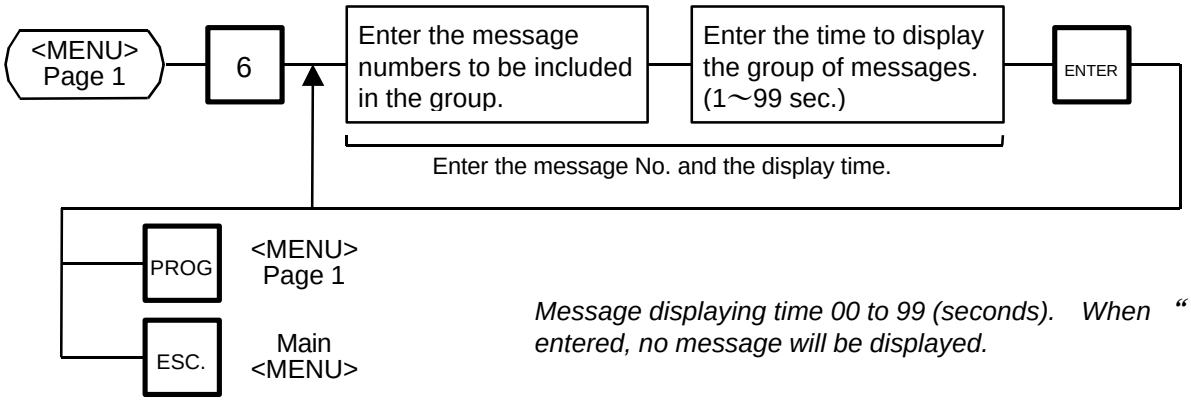
Menu Page: 1
Item No.: 6

You can combine some messages set in Section 11.6 together and create a maximum of 24 different combination messages.

Message construction


8 7 6 5 4 3 2 1
n n n n n n n n
Message display time:
Message display time ranges from 00 to 99 (seconds). When "00" is entered, no message will be displayed.
3rd message:
01 to 08: represents messeages No. 1 to 8
11 to 23: represents logo No. 01 to 13
2nd message:
01 to 08: represents message No. 1 to 8
90 to 93: represents display methods
90: Flashing
91: Curtaining
92: Scrolling up
93: Scrolling down
1st message:
01 to 08: represents message No. 1 to 8

NOTE: *When the fixed message is selected, set "00" as the 1st and 2nd messages. Otherwise, set "00" as the 1st message. When the Flashing, Curtaing, Scrolling up or Scrolling down is selected, set "00" as the 1st message.*



Message displaying time 00 to 99 (seconds). When "00" is entered, no message will be displayed.

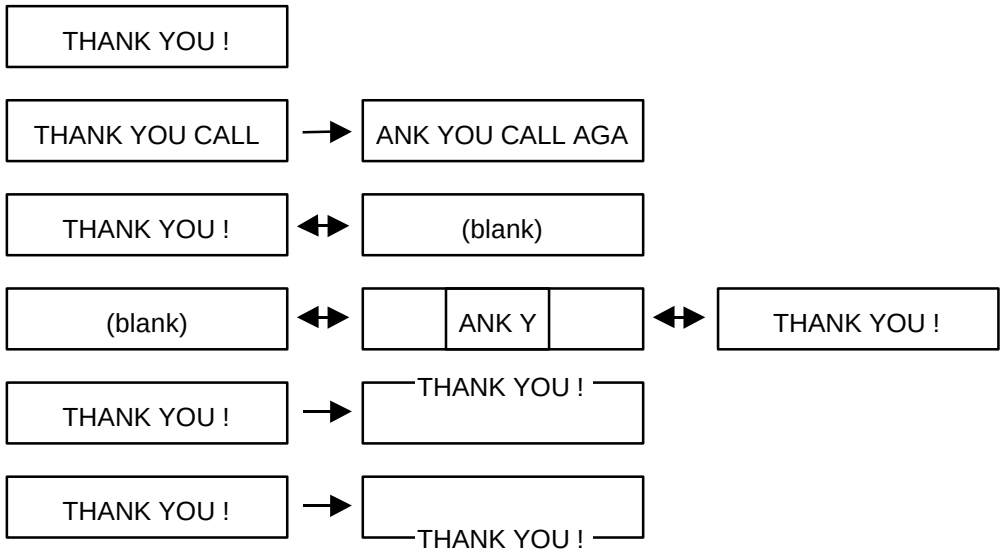
NOTE: *The combination No. is selected as follows by* ENTER *key.*

combi. 1 → combi. 2 → • • • • → combi. 8

3. Display method varios depending on message construction.
   1) message combination
      a. single message ••••••• either scrolling or fixed is available.
      b. multiple message •••••• scrolled regardless of selection.
   2) logo combination
      Logo must be a single logo and a fixed display. When logos are combined, no message will be displayed.
   3) combination of message and logo
      It is prohibited. When both a message and logo are combined together, only message will be displayed.

4. You can press the PROG. and the ESC. keys to exit the procedure at any time. However, no data will be stored without pressing the ENTER key.

5. Display method
   1) Fixed
   2) Scrolling
   3) Flashing
   4) Curtaining
   5) Scrolling up
   6) Scrolling down

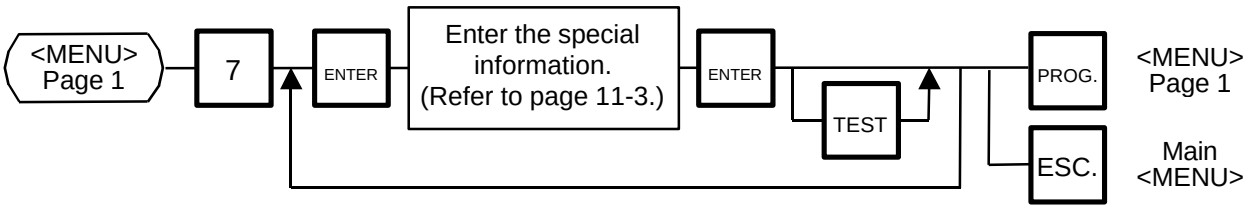


NOTE: *The scrolling up/down methods allow displaying 16 characters per line, up to a total of 90 characters per display.*

11.8 SPECIAL INFORMATION

Menu Page: 1
Item No.: 7

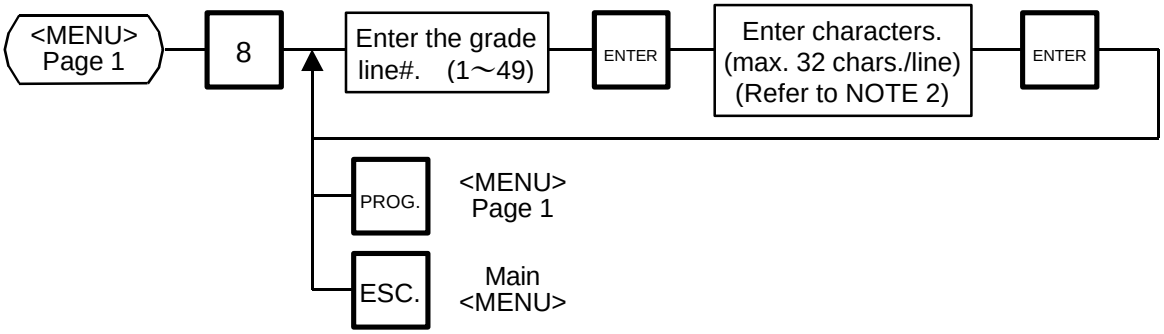
When the Net Weight Statement label is selected, 3 lines (32 characters/line) of special information can be printed in the label position where the net weight data is to be printed. The special information can be printed in the weigh and By Count mode. In the Fix mode, the net weight data is printed.



11.9 GRADE LINE

Menu Page: 1
Item No.: 8

You can set the maximum 49 kinds of grade lines (max. 32 characters/line), and call one of them to print it on the label.

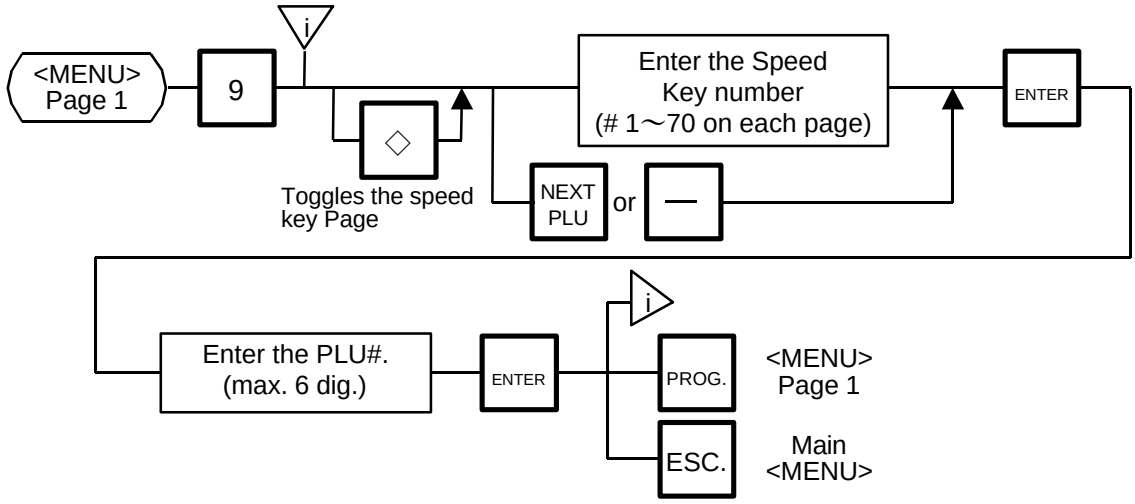


NOTES: *1. Print position of grade line can be changed by initial setting.*
2. Refer to page 11-3, for information regarding how to enter the Grade Line.

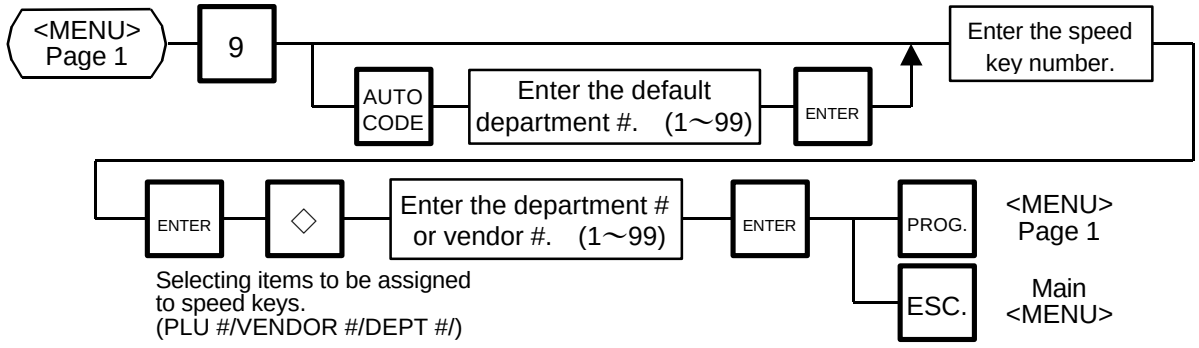
11.10 SPEED KEY SETTING

Menu Page: 1
Item No.: 9

The SL-9000 has a maximum of 70×2 speed keys which are very convenient to call PLUs quickly. (Refer to page 5-3 regarding the Key Layout.)



■ Setting Department/Vendor Number



- Department Number

When initial set #10-6 is set to "1", the six-digit PLU # is divided into two; the upper two digits are assigned to department #, and the lower four digits to PLU.

The department # is automatically added in the front of the four-digit PLU # and treated as a six-digit PLU #.

In case of "PROG.", "Report", and "Reset" modes, PLU # is treated as a six-digit number. So the upper two digits are not treated as department #. Consequently the four-digit PLU # is available only in "REG.", "M.DOWN", and "REWRAP" modes.

NOTE: *The default Dept No. is a two- digit serial number ranging from o to 99. Entering a "0" clears a Dept. No.*

- Vendor Number

Vendor numbers can be be set when the Initial Setting #11-1 is set to 1.

Vendor numbers are assigned to the speed keys in two ways:

① Individual vendor number: 00-39

Vendor # is assigned to the speed keys one by one.

② Group vendor number: 0-, 1-, 2- and 3-

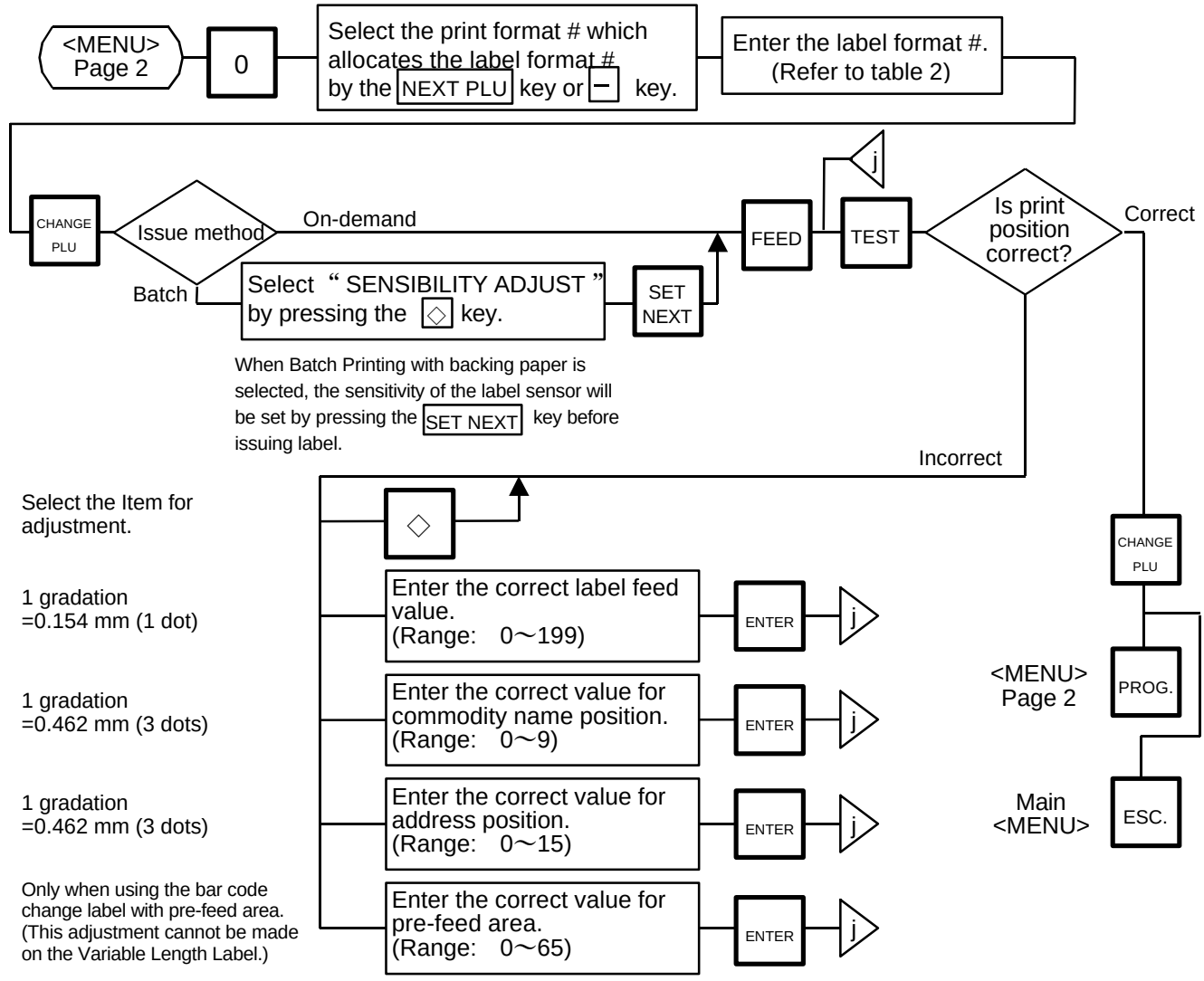
Maximum 10 vendor numbers can be assigned to one speed key, resulting in 4 speed keys in total. When assigning group vendor numbers to the speed keys, enter the first digit of the vendor key (0, 1, 2 or 3) plus a bar (-).

Vendor numbres can be called whichever half of the speed keys are selected.

11.11 PRINT FORMAT

Menu Page: 2
Item No.: 0

The The SL-9000 can memorize 5 different print formats. After print formats are set, you can call them by pressing the print format number.


<MENU> Page 2
0
Select the print format # which allocates the label format # by the NEXT PLU key or – key.
Enter the label format #. (Refer to table 2)
CHANGE PLU
Issue method
On-demand
Batch
Select " SENSIBILITY ADJUST " by pressing the ◇ key.
SET NEXT
When Batch Printing with backing paper is selected, the sensitivity of the label sensor will be set by pressing the SET NEXT key before issuing label.
FEED
TEST
j
Is print position correct?
Correct
Incorrect
Select the Item for adjustment.
◇
1 gradation =0.154 mm (1 dot)
Enter the correct label feed value. (Range: 0～199)
ENTER
1 gradation =0.462 mm (3 dots)
Enter the correct value for commodity name position. (Range: 0～9)
1 gradation =0.462 mm (3 dots)
Enter the correct value for address position. (Range: 0～15)
Only when using the bar code change label with pre-feed area. (This adjustment cannot be made on the Variable Length Label.)
Enter the correct value for pre-feed area. (Range: 0～65)
CHANGE PLU
<MENU> Page 2
PROG.
Main <MENU>
ESC.

NOTES:

1. *When a commodity name position is adjusted, an address position will move automatically.*
2. *When entering the other label format #, fine adjust values are initialized.*
3. *Selecting label format numbers other than those provided in Table 2 results in an error.*
4. *When selecting a variable length label format, rectangles are printed instead of print items when test printing.*
5. *Pressing the ◇ key allows you to select a print format number from 1 to 5.*
6. *Be sure to press the SET NEXT key when a label format for batch printing with backing paper is selected.*

■ Table 2: Label Format Number Table

Select the format # for the label to be used by referring to the table below.

	Format #	Print format			48-mm wide label				57-mm wide label			
		Basic form	Ingredient	Commodity		Length	Nutri.	F.S.		Length	Nutri.	F.S.
	00 (50)	NON POS	0	2 (48mm) lines only	Yes	30.0	No	No	No	---	---	---
	10 (60)	POS	0	2 (48 mm) / 4 (57 mm)	Yes	40.0	No	No	Yes	49.2	No	No
	11 (61)		6	2 (48 mm) / 4 (57 mm)	Yes	54.8	No	No	Yes	63.5	No	No
	12 (62)		12	2 (48 mm) lines only	Yes	68.8	No	No	No	---	---	---
	13 (63)		18	2 (48 mm) / 4 (57 mm)	Yes	82.6	No	No	Yes	92.8	No	No
	14 (64)		22	2 (48 mm) lines only	Yes	92.0	No	No	No	---	---	---
	15 (65)		38	4 (57 mm) lines only	No	---	---	---	Yes	138.1	No	No
	16 (66)		37	4 (57 mm) lines only	No	---	---	---	Yes	138.1	Yes	No
	21 (71)	NET WT.	6	2 (48 mm) / 4 (57 mm)	Yes	69.9	No	No	Yes	85.7	No	No
	22 (72)		12	2 (48 mm) lines only	Yes	84.1	No	No	No	---	---	---
	23 (73)		18	4 (57 mm) lines only	No	---	---	---	Yes	112.7	No	No
	24 (74)		22	2 (48 mm) lines only	Yes	106.4	No	No	No	---	---	---
	25 (75)		38	4 (57 mm) lines only	No	---	---	---	Yes	158.7	No	No
	26 (76)		38	4 (57 mm) lines only	No	---	---	---	Yes	158.7	Yes	No
	31 (81)	BOTTOM BARCODE	6	2 (48 mm) / 4 (57 mm)	Yes	76.2	No	No	Yes	96.8	No	No
	32 (82)		12	2 (48 mm) lines only	Yes	90.5	No	No	No	---	---	---
	33 (83)		18	2 (48 mm) / 4 (57 mm)	Yes	104.8	No	No	Yes	123.8	No	No
	34 (84)		22	2 (48 mm) lines only	Yes	112.7	No	No	No	---	---	---
	35 (85)		38	4 (57 mm) lines only	No	---	---	---	Yes	171.4	No	No
	36 (86)		22/38	2 (48 mm) / 4 (57 mm)	Yes	112.7	Yes	No	Yes	171.4	Yes	No
	41 (91)	FREE FORMAT		4 (57 mm) lines only	No	---	---	---	Yes	Free	No	Yes
	42 (92)				No	---	---	---	Yes	Free	No	Yes
	43 (93)				No	---	---	---	Yes	Free	No	Yes
*	44 (94)	FSP	13	2 (57 mm) lines only	No	---	---	---	Yes	98.4	No	Yes
	48	VALIABLE		2 (48 mm) / 4 (57 mm)	Yes	Variable	Yes	No	Yes	Variable	Yes	Yes
	49	ROTATION	21	4 (57 mm) lines only	No	---	---	---	Yes	Variable	Yes	Yes

*: SL-9000N only

NOTE:

Format No.

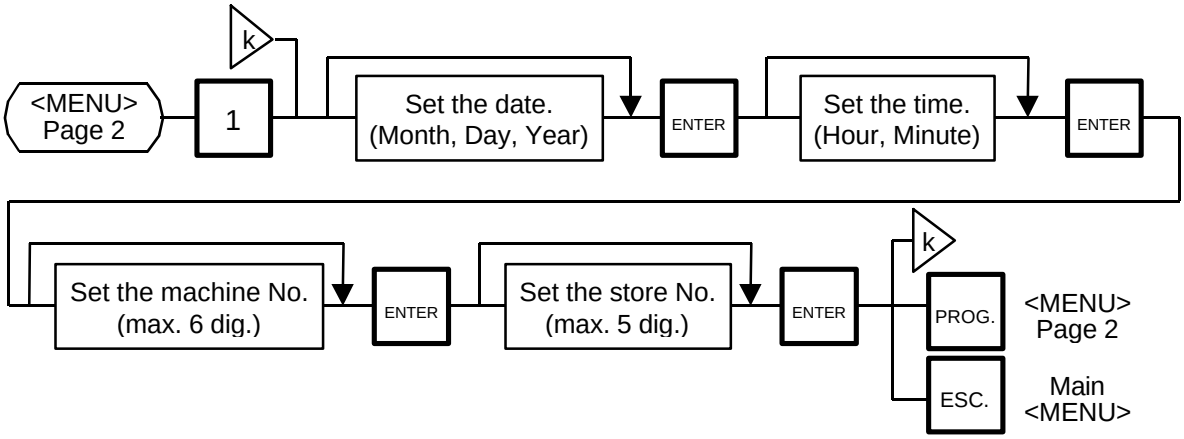
0: 0 ingredient line
1: 6 ingredient lines (Except free format)
2: 12 ingredient lines (Except free format)
3: 18 ingredient lines (Except free format)
4: 22 ingredient lines
5: 38 ingredient lines
6: Ingredient + Nutrition on white label with symbols
7: 960 format
8: Variable length
9: Variable length + rotation

0: NON POS (On demand print)
1: POS (On demand print)
2: NET WT. Statement (On demand print)
3: Bottom barcode (On demand print)
4: Other than 0 to 3 (On demand print)
5: NON POS (Batch print on labels with back paper)
6: POS (Batch print on labels with back paper)
7: NET WT. Statement (Batch print on labels with back paper)
8: Bottom barcode (Batch print on labels with back paper)
9: Other than 5 to 8 (Batch print on labels with back paper)

11.12 DATE/TIME SETTING

Menu Page: 2
Item No.: 1

Date, time, machine number, and store code are set with this procedure.



NOTES:

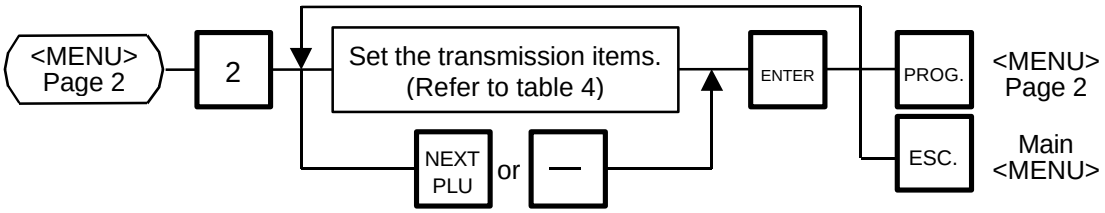
1. *Express the time in a 24-hour military format.*
2. *The SL-9000 will check details of date (time) input, and any wrong date (time) will result in an error mode. Then the correct date (time) should be re-entered and press the* CLEAR *key.*
3. *Even when initial Set 8-4, 8-5 or 8-6 is set to the "Julian Date" side, the way to enter the date in the date setting operation is the same as in the ordinary case.*
4. *The date display method can be changed by the initial setting.*

11.13 CMT/PL-3

Menu Page: 2
Item No.: 2

■ CMT Operations

The SL-9000 is designed to interface with a Cassette Magnetic Tape loader. This loader allows the transfer of the entire PLU file, ingredient file and other data from the SL-9000 to tapes. This can be accomplished in number of operation steps.
In turn, information from the tape can also be transferred to another SL-9000 scale.

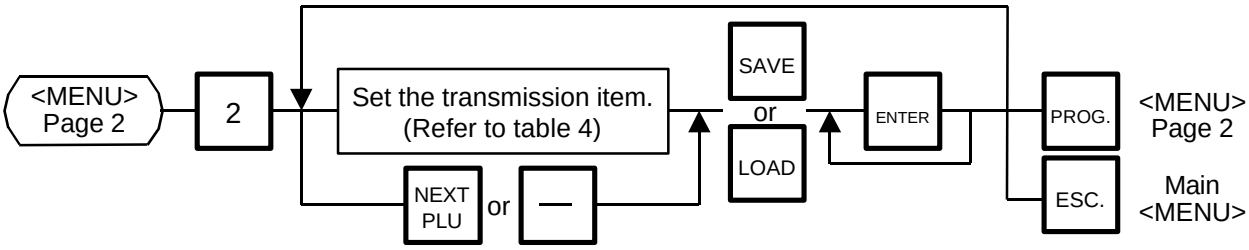


NOTES:

1. *The error mode can be released by pressing the* CLEAR *key, and operated again through the above steps.*
2. *Use the metal cassette tape which is commercially available and has a capacity of 45 or 60 minutes recording.*
3. *For operations of the CMT loader, refer to the instruction manual provided with the CMT loader.*

■ PL-3 Operation

Connect the PL-3 to the SL-9000 by using RS-232C Cable, then turn on the power of the SL-9000 and the PL-3.
Insert a data disc into the PL-3 and adjust the transmission rate to the SL-9000 (7 2 :4800 BPS or 7 3 : 2400 BPS) by using the rotary switch.
Press the SAVE key of the PL-3, then check whether the SAVE LED is on.
Program the file number of the data disc by using the rotary switch.
(4 1 : File No. 1, 4 2 : File No. 2, ... 4 8 : File No. 8, 4 9 : File No.9)



NOTES: *1. Press* SAVE *or* LOAD *key on the PL-3.*
2. In the event Enter Key is not pressed within 10 seconds after SAVE *or* LOAD *key is pressed, the Time Out Error results.*
3. After pressing the ENTER *key, the operation ends when "00" appears in the 7 seg. display and LAMP goes off. Remove the data disc and turn the power off.*

Table 3: Error code during PL-3 operation

Error Code		Error Message
1	0	FDC ERROR
	1	FDK MISINSERTION ERROR
	2	UNAVAILABLE FDK INSERTION ERROR
	3	VOL. LABEL UNMATCH ERROR
	4	FDK MEMORY FULL ERROR
	5	WRITE PROTECT ERROR
	6	NO SEARCH FILE ERROR
3	1	TIME OUT ERROR
	2	LOAD ERROR
	3	FDK ERROR
	4	BUSY STATUS
	5	POWER FAIL ERROR
	6	OVERRUN ERROR

Error Code		Error Message
3	7	FRAMING ERROR
	8	PARITY ERROR
7	0	DATA ERROR
	1	STATUS ERROR
	2	TIME OUT ERROR
	3	FDK READ/WRITE ERROR
	F	DESIGNATED SELECT KEY ERROR
8	0	RAM READ/WRITE ERROR
	1	ROM CRC ERROR
	2	RAM BACK UP BATTERY ERROR
	3	FDC DIAG LEVEL 0 ERROR
	E	SYSTEM FDK LOADING ERROR
	F	SYSTEM ERROR

1) When the error code in FF, this system enters stop status. (Turn the power off/on for release.)
2) When the error code is F2 or FE, perform the status clear (9 9).
3) If an error occurs, refer to the PL-3 Owner's Manual and solve the problem.

■ Table 4: Transmission Item List

ITEM #	Title on the Display		Contents of Transmission	CMT	PL-3
2	VERIFY PLU & ING. = CMT	2	COMPARE PLU & ING. IN OLD FORMAT	○	○
3	READ PLU & ING. FM CMT	3	READ PLU & ING. IN OLD FORMAT	○	○
4	WRITE PLU TO CMT	4	SAVE PLU IN NEW FORMAT	○	○
5	VERIFY PLU = CMT	5	COMPARE PLU IN NEW FORMAT	○	○
6	READ PLU FROM CMT	6	READ PLU IN NEW FORMAT	○	○
7	WRITE ING. TO CMT	7	SAVE ING. IN NEW FORMAT	×	○
8	VERIFY ING. = CMT	8	COMPARE ING. IN NEW FORMAT	×	○
9	READ ING. FROM CMT	9	READ ING. IN NEW FORMAT	×	○
10	WRITE NUTRI. TO CMT	10	SAVE NUTRITION IN NEW FORMAT	○	○
11	VERIFY NUTRI. = CMT	11	COMPARE NUTRITION IN NEW FORMAT	○	○
12	READ NUTRI. FM CMT	12	READ NUTRITION IN NEW FORMAT	○	○
13	WRITE SPEED KEY	13	SAVE SPEED KEY IN NEW FORMAT	○	○
14	VERIFY SPEED KEY	14	COMPARE SPEED KEY IN NEW FORMAT	○	○
15	READ SPEED KEY	15	READ SPEED KEY IN NEW FORMAT	○	○

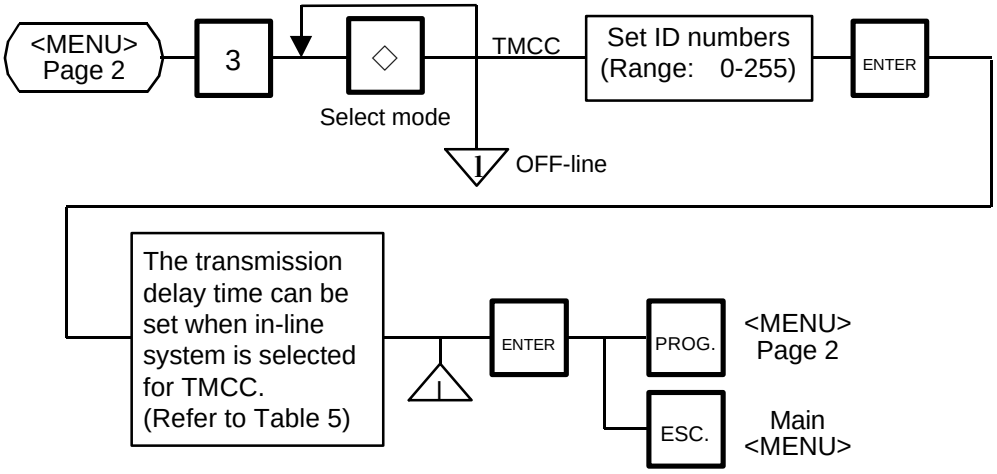
○: operable, ×: inoperable

NOTE: *When the PL-3 is connected, more than one FDK may be required depending on the amount of ING. data.*
Be careful of the following when changing a FDK.
a: During the write operation, replace with a formatted FDK.
b: Verify and read data in same order as the write.
To cancel to change a FDK, press the CLEAR *key.*

11.14 IN-LINE/LOCAL

Menu Page: 2
Item No.: 3

When the SL-9000 is used as a satellite in an in-line system, the “ID #” and “Transmission delay time” can be set by the following procedure.



NOTES: *1. The TMCC baud rate is fixed to 4800 BPS.*
2. After setting the ID #, turn the power switch OFF and ON again.
3. This setting is not available in case that the Initial set #13-6 is set to 1 (LAN: allowed).

■ **Table 5: Transmission Delay Time Table**

	TR-Time (ms)		TR-Time (ms)
1	20 - 39	6	120 - 139
2	40 - 59	7	140 - 159
3	60 - 79	8	160 - 179
4	80 - 99	9	180 - 199
5	100 - 119		

The default is 3.

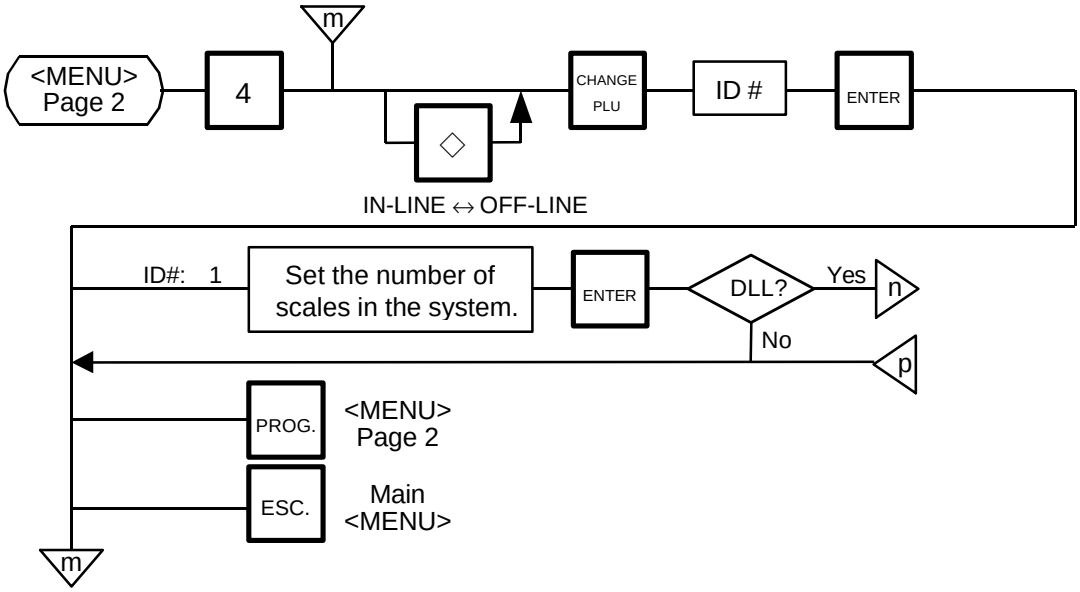
11.15 LON SYSTEM

Menu Page: 2
Item No.: 4

The SL-9000 scales which consists of a master, satellites, and a backup master are connected each other by the LON cable to transmit data such as PLU, ING., NUTRI, etc.

ID# 1 is reserved for the master terminal.
ID# 2 is reserved for the backup master terminal or satellite terminal.
ID# 3 to 32 are for satellite terminals.

Setting numbers other than the above results in an error.



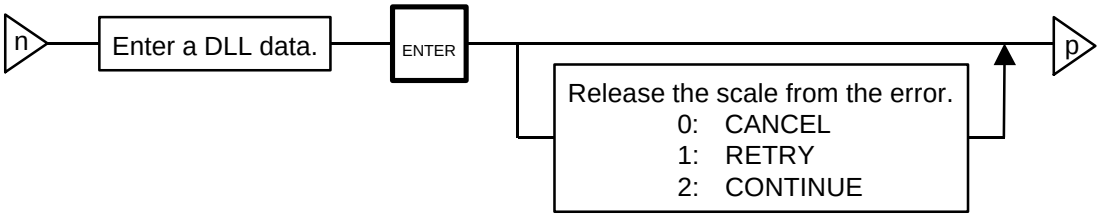
NOTES: *1. Before starting the above procedure, press the ◇ key and enter IN-LINE mode.*
2. When installing the backup master terminal, set the master scale's initial status of #9-1 to 1.
3. Set ID # to all scales connected by LON cable.
4. When the display power is turned on, a satellite terminal is ready to receive data from the master terminal.
*5. After setting the ID #, turn the pow*er switch OFF and ON again.

■ Data Transmission

The following data is down-line-loaded.

Page 1: (0). All (PLU+ING+NUTRI)
(1). PLU
(2). ING.
(3). NUTRITION
(4). U. PRICE
(5). DATE/TIME
(6). MESSAGE LINK (Message)
(7). LOCK SCALE (Check the LON cable)
(8). OPEN SCALE (Release the lock after checking the LON cable.)
(9). CHANGE PAGE

Page 2: (0). SPEED KEY
(1). LOGO
(2). VENDOR
(3). FREE FORMAT
(4). ADDRESS (SL-9000N only)
(5). INITIAL (#0 - #19, SL-9000N only)
(9). CHANGE PAGE



NOTE: *DLL is performed automatically in the following two ways. It is selectable by the Initial Settings #0-6 and #0-7.*

(1) LOCK SCALE method
*Step 1: "LOCK SCALE" is sent. (*1)*
*Step 2: Selected data is sent. (*2)*
Step 3: "OPEN SCALE" is sent.
**1: If an error occurs during step 1, the error terminal ID# is indicated. Select "cancel", "retry" or "continue" to release the terminal from an error.*
cancel: Quits the operation after sending "OPEN SCALE"
retry: Tries to send "LOCK SCALE" again.
continue: Ignores the error terminal and starts DLL.
**2: If an error occurs during step 2, the error terminal ID# is indicated. Press the* CLEAR *key to return to the DLL data selection menu.*

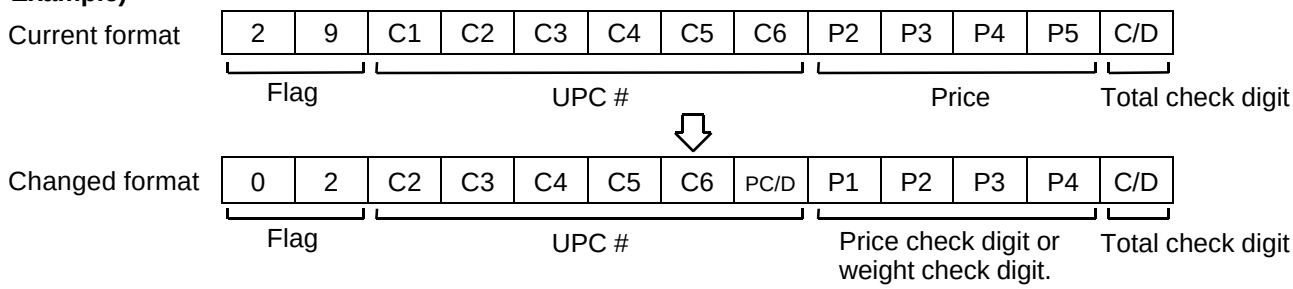
(2) Background DLL
*Step 1: Selected data is sent. (*3)*
**3: If an error occurs, the error terminal ID# is indicated. Press the* CLEAR *key to return to the DLL data selection menu.*

11.16 BAR CODE FORMAT

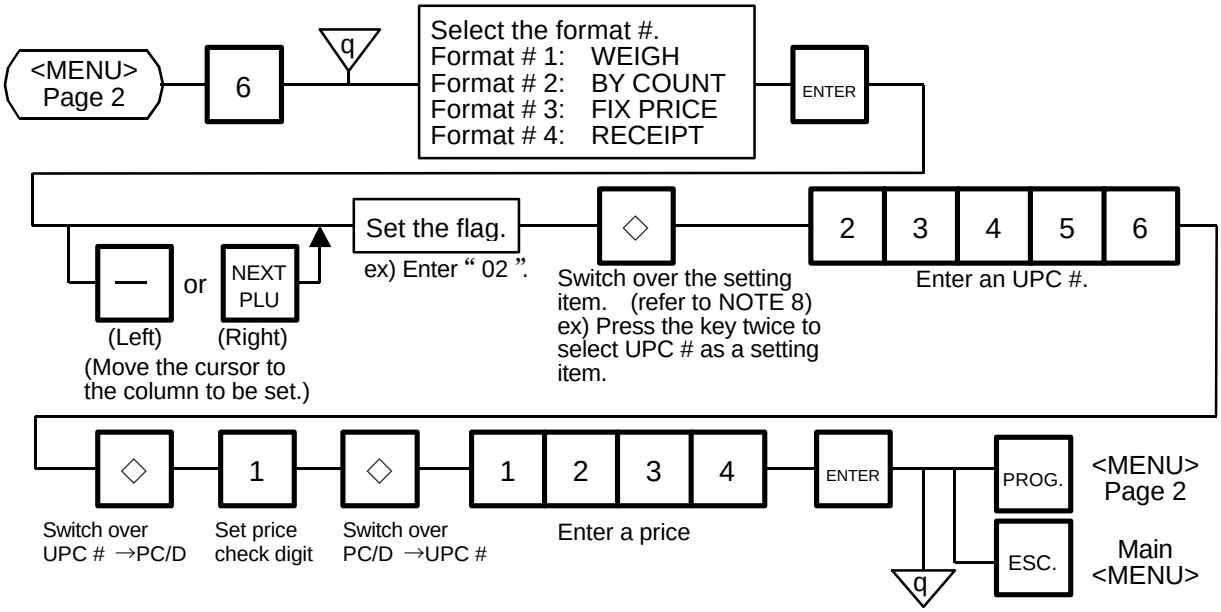
Menu Page: 2
Item No.: 6

With the SL-9000 scale, four kinds of bar code formats are available. These formats can be changed freely.

Example)


Current format
2 9 C1 C2 C3 C4 C5 C6 P2 P3 P4 P5 C/D
Flag
UPC #
Price
Total check digit
Changed format
0 2 C2 C3 C4 C5 C6 PC/D P1 P2 P3 P4 C/D
Flag
UPC #
Price check digit or weight check digit.
Total check digit

When changing the above example format into the weigh format described in NOTE 1, use the following procedure.



NOTES: *1. In this printer, the previously set bar code format is initialized to the following default by RAM clear.*

Default Bar Code Format:

① Weigh or Fix Price Format

0	2	C2	C3	C4	C5	C6	PC/D	P1	P2	P3	P4	C/D

② By Count Format

0	0	0	C2	C3	C4	C5	0	0	0	0	C6	C/D

③ Receipt Format

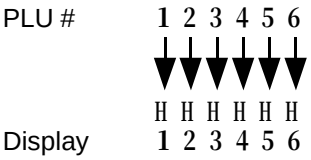
0	2	0	0	0	0	PC/D	P1	P2	P3	P4	P5	C/D

2. *When the* [ENTER] *key is pressed, bar code format is checked. An error occurs in the following cases.*
   - ① *Check digit (C/D) is at other than digit-13.*
   - ② *Price check digit (PC/D) cannot be calculated. (Price is other than 4 or 5 digits.)*
   - ③ *Price is not set serially beginning from P1 (P1 to P4, or P1 to P5).*
   - ④ *Weight is not set serially beginning from W1 (W1 to W5).*

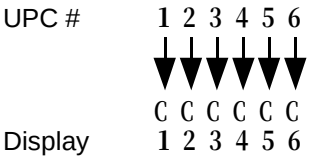
3. *The usable keys to set the column are as follows:*

FLAG	[0] ~ [9]
PLU #	[1] ~ [6]
UPC #	[1] ~ [6]
PC/D	[1]
PRICE	[1] ~ [7]
WEIGHT	[1] ~ [6]
C/D	[1]

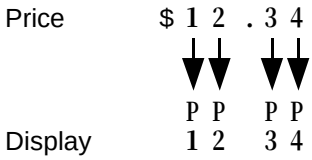
4. *Digits and display of PLU #*

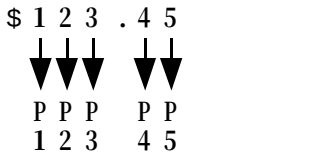


5. *Digits and display of UPC #*

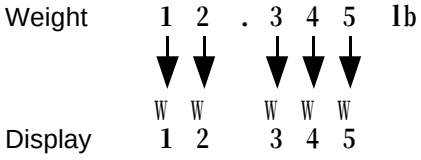


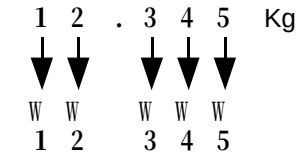
6. *Digits and display of price*



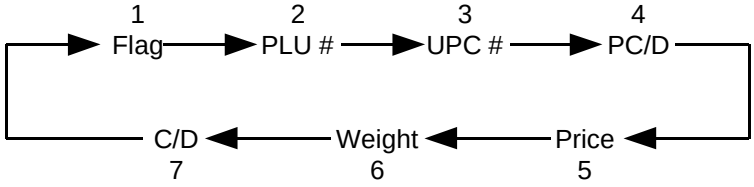


7. *Display of weight Digits*





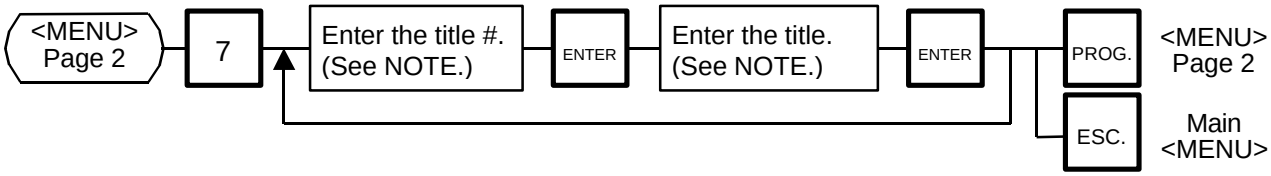
8. *Setting Items*



11.17 TITLES

Menu Page: 2
Item No.: 7

You can register and change displayed/printed titles of the additional information area for nutrition facts using the following procedure. Registered or changed titles are stored in the RAM. When ALL clear or RAM clear is executed, these titles will be cleared and the initial titles will resume. Before starting this operation, set the initial setting #7-3 to 1.



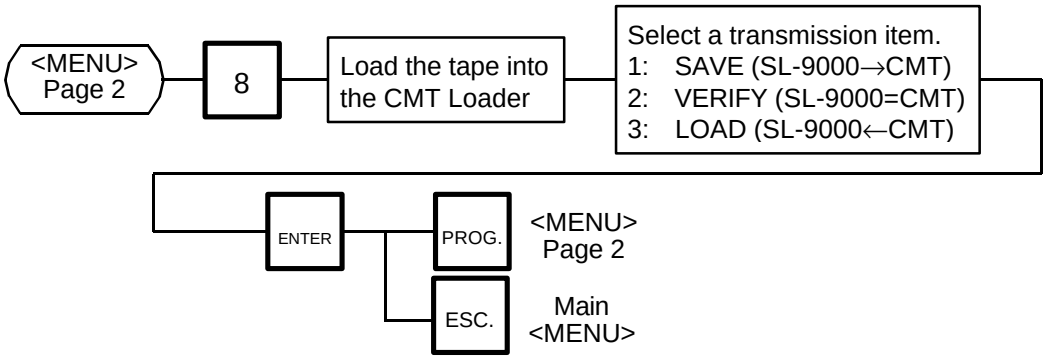
NOTE: *Title No. and format of the additional information area*

Item	Title No.	Format
Additional 1	221	Max. 22-character title
Additional 2	231	:mg or g Max. 19-character title
Additional 3	232	
Additional 4	233	
Additional 5	234	
Additional 6	235	
Additional 7,8	238	Max. 10 character title Space Max. 10 character title (Two different titles can be set in one area)
Additional 9,10	239	
Additional 11,12	240	

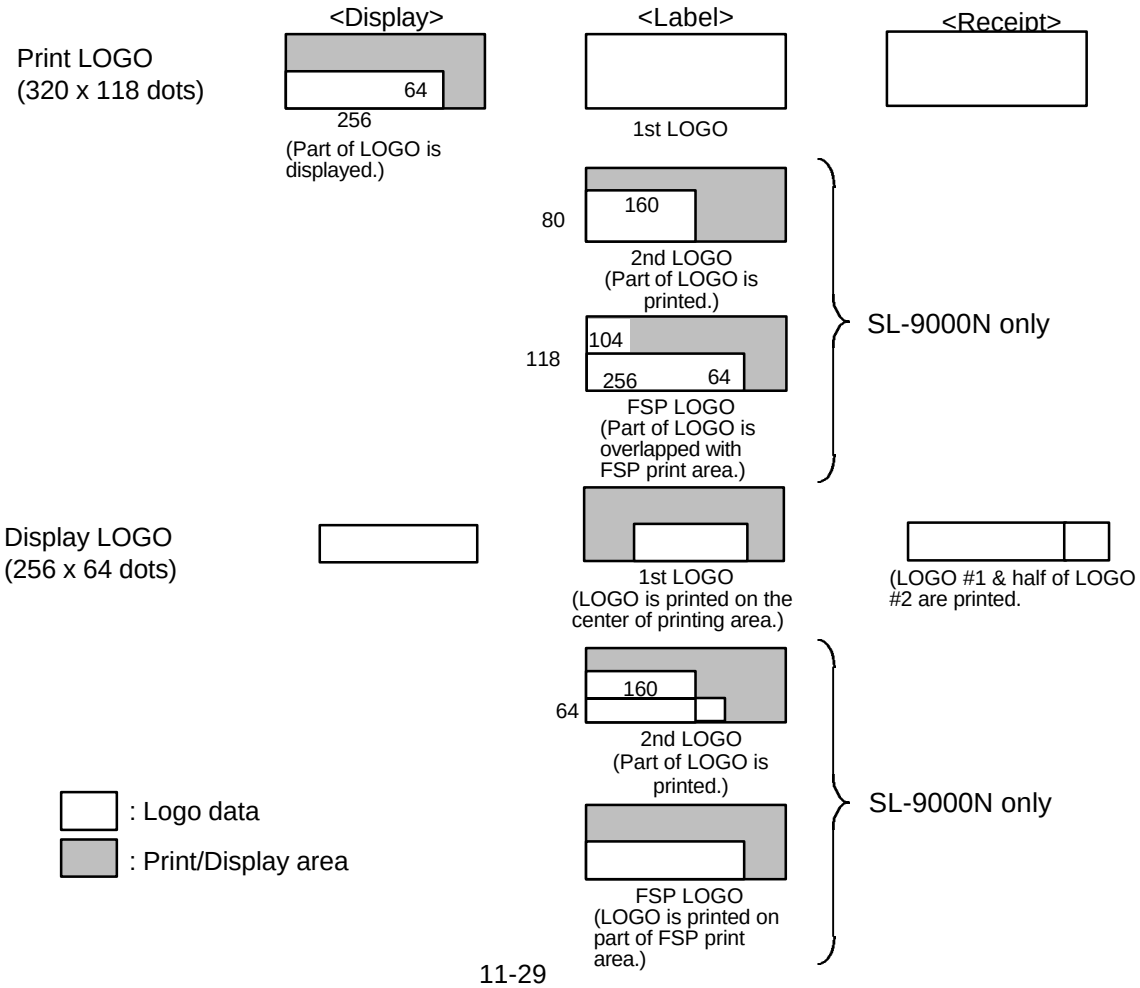
11.18 TRANSFERRING LOGO DATA

Menu Page: 2
Item No.: 8

Logo data is created on a PC and stored into RAM through the CMT interface. Two different sizes of logos, 320x118 dots and 256x64 dots, are available on the SL-9000 series. 64 KB of RAM area is secured for logo data, in which the maximum of 13 logos (320x118 dots) or 26 logos (256x64 dots) can be stored.
Before starting the following operation, set the initial setting #10-7 to 1.



NOTE: *Two sizes of logos are printed differently as follows:*



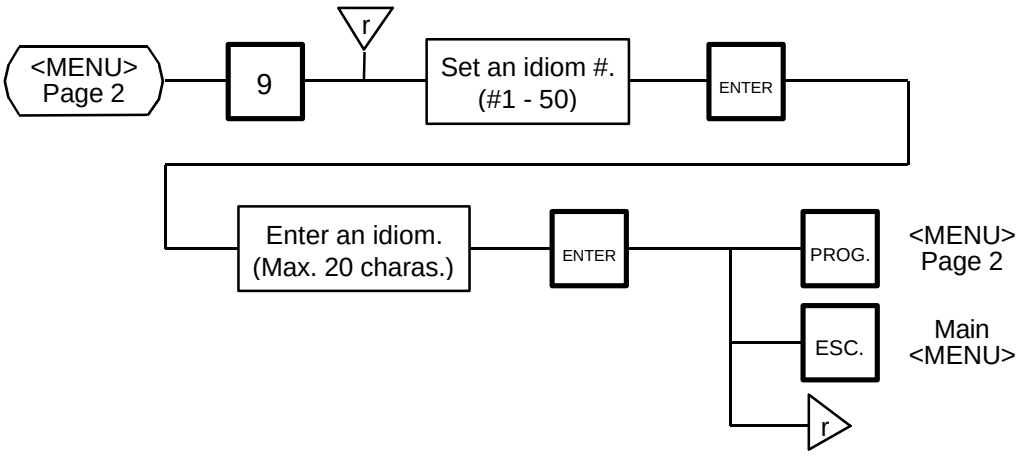
■ **Table 6: Error message during data transmission**

Error message	Cause	Error position	
		Header text	Data text
DATA ERROR	Timeout	○	○
	Incorrect segment	○	○
	Incorrect logo size	○	
	Incorrect number of logos	○	
	Incorrect logo number		○
	Incorrect number of dots to be printed.		○
	Parity error	○	○
	Framing error	○	○
	Overrun error		○

11.19 IDIOM SETTING

Menu Page: 2
Item No.: 9

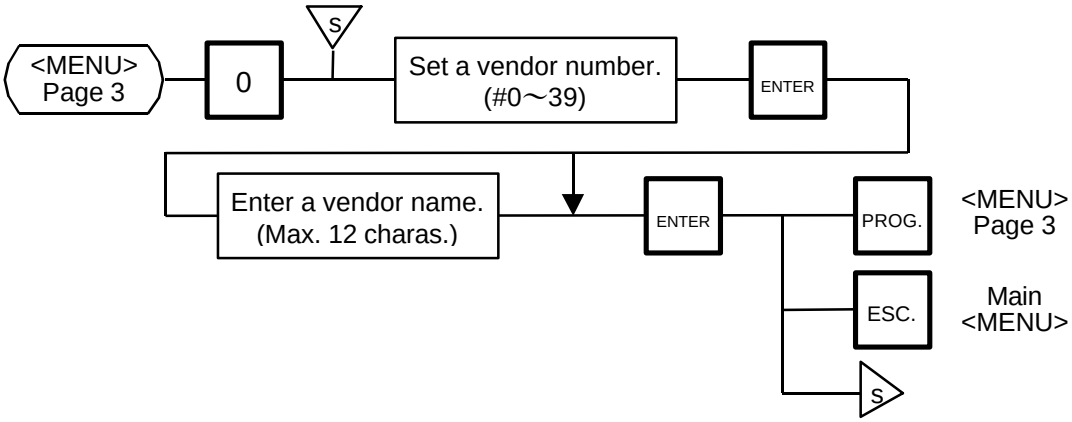
Up to 50 terms frequently appearing in ingredient messages can be preset using the following procedure. The idiom number must be set from 1 to 50 in order. One idiom can contain a maximum of 20 characters.



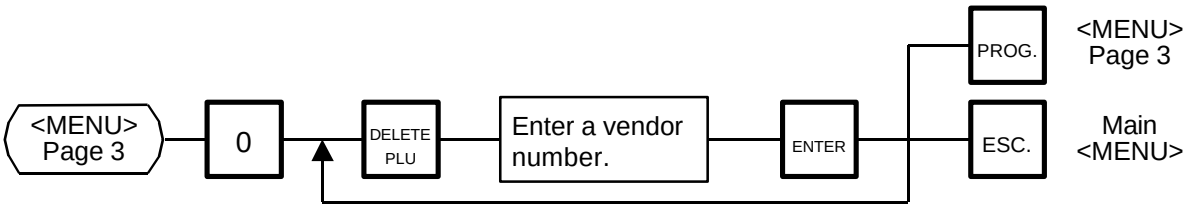
11.20 VENDOR SETTING

Menu Page: 3
Item No.: 0

Up to 40 vendors can be registered using the following procedure. The vendor number must be set from 0 to 39 in order. One vendor name can contain a maximum of 12 characters.



● **Deleting a vendor number**



11.21 FREE FORMAT SETTING

Menu Page: 3
Item No.: 1

When using 57-mm wide labels, up to three print formats can be changed freely. Moreover, characters can be rotated and magnified, and print items are selectable.
Enter the coordinate of each print item's lower left corner using the lower left corner of a label as the origin. When a print item is located beyond the label width, an error will occur.

Key functions

① [↓] : Moves downward (Data is stored.)

② [ENTER] : Moves downward (Data is stored.)

③ [↑] : Moves upward (Data is stored.)

④ [→] : Moves to the right

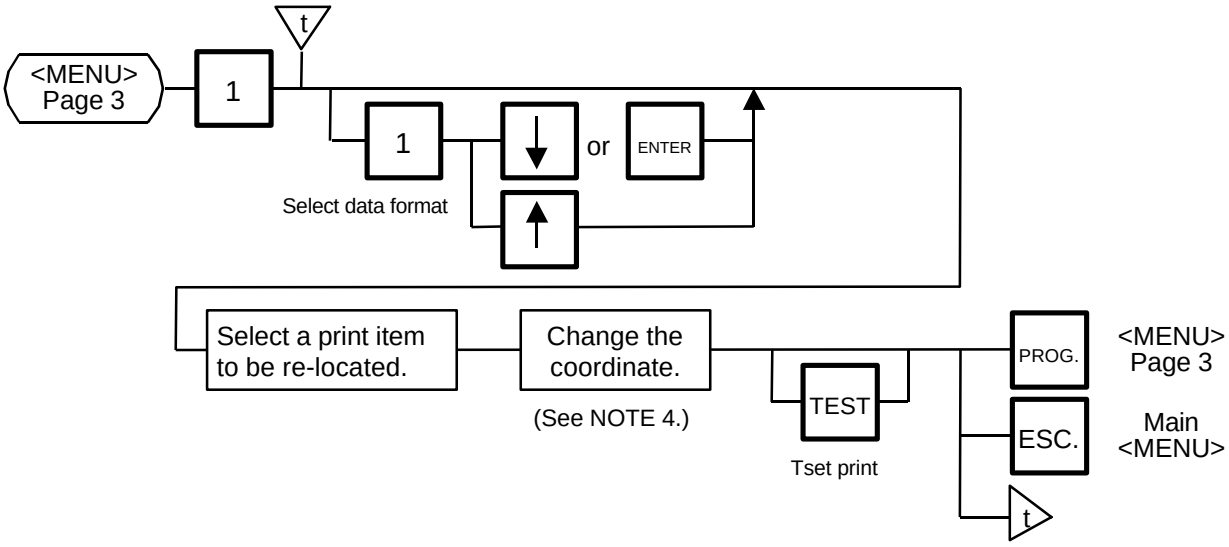
⑤ [←] : Moves to the left

⑥ [◇] : Selects a setting

a. ROT (Rotation) : 0 ° → 90 ° → 180 ° → 270 °

b. MAG (Magnification) :
- 0: normal
- 1: × 2 (width)
- 2: × 2 (height)
- 3: × 4 (width: x 2, height: x 2)

c. PRT (Print) : ON ↔ OFF



NOTES: *1. The following print items cannot be magnified.*
(1) LOGOs
(2) Safe handling precautions
(3) Ingredient messages
(4) Barcode
(5) FSP Block (SL-9000N only)
2. Base label format numeric data is shown automatically.
X coordinate: 0-383 dots (1 dot = 0.132 mm)
Y coordinate: 0-1300 dots (1 dot = 0.154 mm)
Format data beyond the effective print area results in an error.
3. Each format data must be set in the following range:
(1) Free Format#s (FREE FMT#): 1-3 (Free format#s 1-3 correspond to the label format #41-43 or #91-93.)
(2) Base label format (BASE LBL#): 57-mm wide label
On-demand: 10, 11, 13, 15, 16, 21, 23, 25, 26, 31, 33, 35, 36 and 44
(3) Length: 30-200 mm
(4) Number of ingredient message lines: 0-38 lines
(5) Bar code height: 0-39 mm
4. Each print item should be printed in the following range.

No.	Print Item	Print area size				Note
		Normal		Rotation		
		X	Y	X	Y	
1	Commodity name (4 line)	384	94	94	416	
2	Ingredient	384	*1	*1	438	*1. Line count x 15 dots
3	Packed ON	84	20	20	92	
4	Packed ON (title)	70	13	13	78	
5	Sell BY	84	20	20	92	
6	Sell BY (title)	70	13	13	78	
7	Weight	106	20	20	112	
8	Weight (title)	105	13	13	112	
9	Unit price	140	20	20	147	
10	Unit price (title)	105	13	13	112	
11	Price	138	32	32	147	
12	Price (title)	105	13	13	112	
13	Barcode	212	*2	----	----	*2. Height/0.154 (dot)
14	Mark (M/R)	12	20	20	12	
15	Tare	100	20	20	107	
16	Tare (title)	34	13	13	38	
17	SP-INFO/NET WT	384	48	48	416	
18	Relish	84	20	20	92	
19	Relish (title)	232	14	14	252	
20	LOGO	320	118	----	----	
21	Safe Handling	384	194	----	----	
22	Address	384	32	32	416	
23	(F) Price	138	32	32	146	
24	(F) Price (title)	105	13	13	120	
25	(F) Unit price	140	20	20	147	
26	(F) Unit price (title)	105	13	13	120	

No.	Print Item	Print area size				Note
		Normal		Rotation		
		X	Y	X	Y	
27	(F) Weight	106	20	20	112	
28	(F) Weight (title)	105	13	13	120	
29	(F) Price	138	32	32	146	
30	(F) Price (title)	105	13	13	120	
31	(F) LOGO	320	118	----	----	
32	FSP block (SL-9000N only)	384	184	----	----	
33	LOGO 2 (SL-9000N only)	160	80	----	----	

When setting the print item position (X and Y), an error will occur in the following cases.

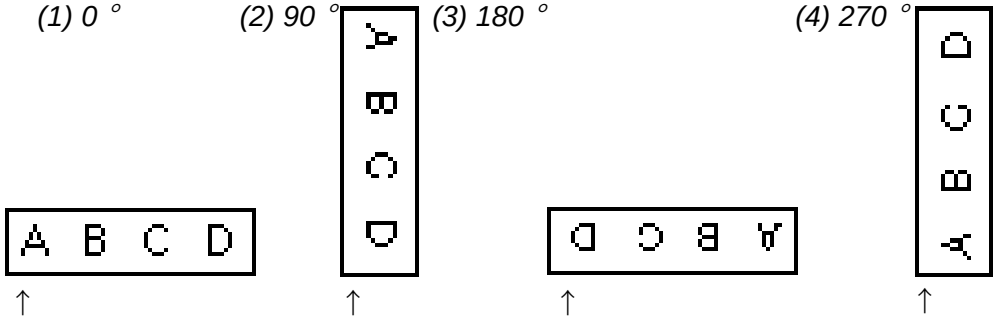
(1) Entered “X” point + Print size “X” > 384 dots.

(2) Entered “Y” point + Print size “Y” > 1300 dots

Magnified print items become double in size.

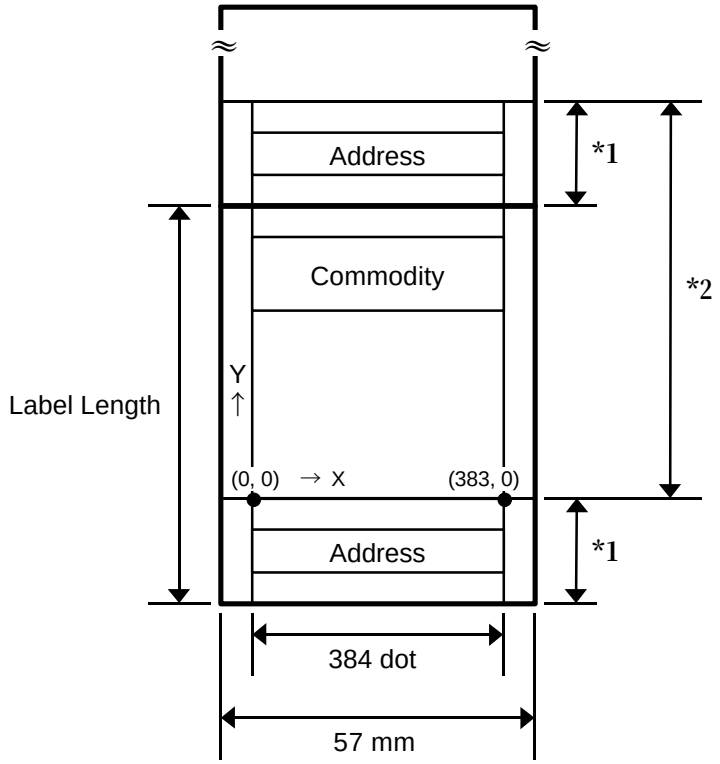
5. *The following items cannot be rotated.*
   (1)LOGO
   (2)Safe handling Precautions
   (3)Bar codes
   (4) LOGO (FREQUENT SHOPPER)
   (5) FSP Block (SL-9000N only)
   (6) LOGO 2 (SL-9000N only)
6. *When pressing the **[TEST]** key, the printer issues a test label.*
7. *Rotated data will be printed so that the lower left corner is positioned at the designated coordinate.*

(1) 0 ° *(2) 90 °* *(3) 180 °* *(4) 270 °*



The points indicated by the arrows are the designated coordinates.

8. Print coordinate



*1 Addresses are printed together with the previous label's data. To print addresses, use normal labels.
POS (Format #10-16): 10.0 mm
NET (Format #21-26): 10.0 mm
Bar code (Format #31-35): 8.5 mm

*2 Free format area

12. PROGRAMMED DATA VERIFICATION REPORTS

12. PROGRAMMED DATA VERIFICATION REPORTS

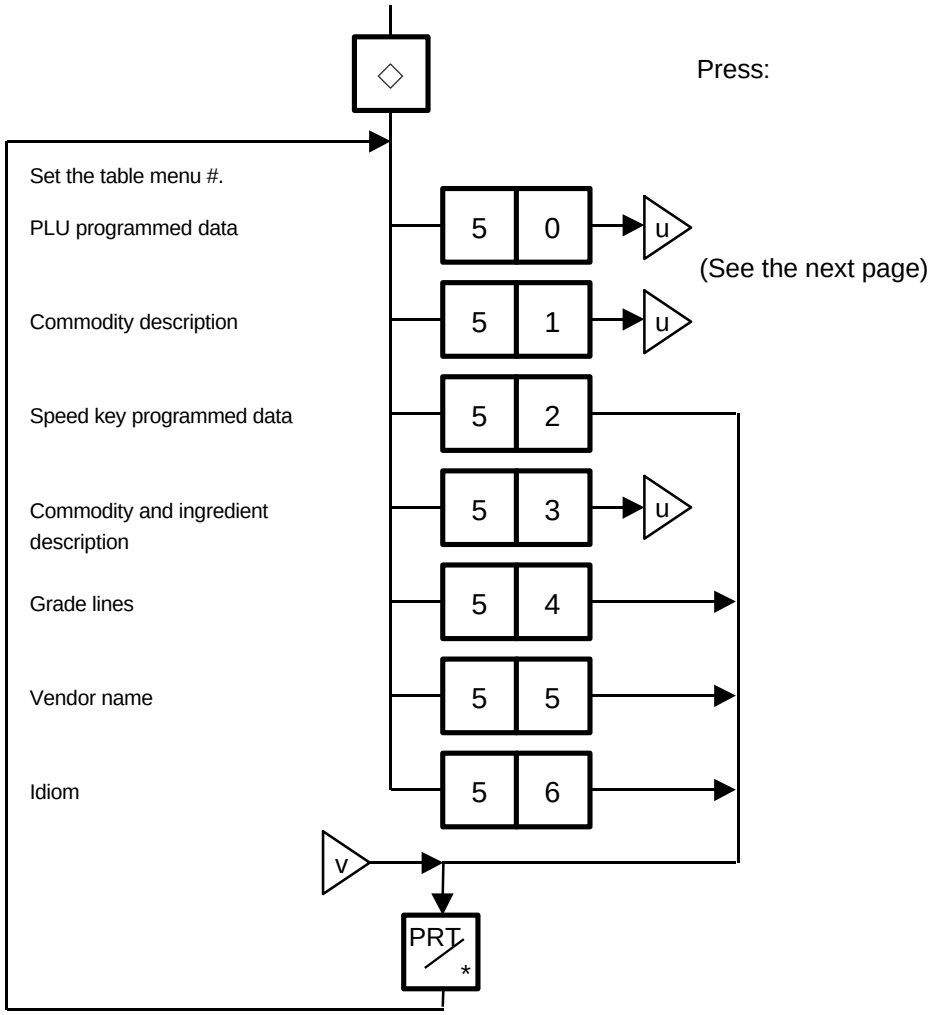
The programmed data can be printed on journal paper. Before issuing these reports, load the journal paper. The programmed data verification reports cannot be issued with any label. The keys to be used in the following procedures are those on the numeric key pad, which is framed in black in the figure on page 5-3, but not on the programming keyboard.

■ How to access REPORT menu

Press the [ESC.] key to access th following display. Enter “5”, and the scale will enter the REPORT menu. If the REPORT menu is protected, enter “5” and a password. (Refer to section 13)

```
<Menu>  MAIN
0. PROG.                5. READ
1. REG                  6. RESET
2. MARK DOWN            7.
3. REWRAP               8.
4. SECURITY             9.
```

Menu : REPORT

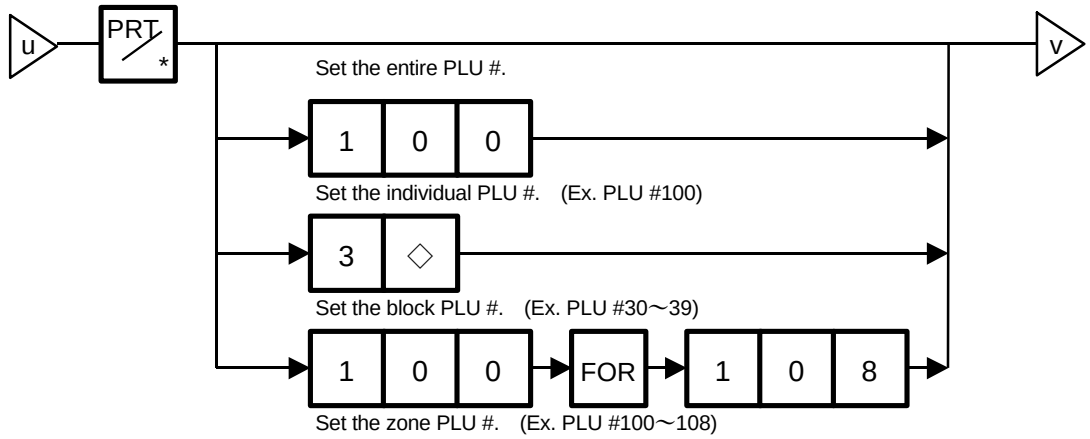


12. PROGRAMMED DATA VERIFICATION REPORTS

Table 7

Menu #	Report Name	Contents
50	PLU programmed data report	All the preset PLU data are listed in the PLU # order (from small to large #).
51	Commodity description report	All the preset commodity names are listed in the PLU # order (from small to large #).
52	Speed key programmed data report	The PLU # and the commodity name preset on each speed key is listed.
53	Commodity and ingredient description report	All the presets commodity names and ingredient messages are listed in the PLU # order (from small to large #).
54	Grade line report	All the preset grade line contents are listed.
55	Vendor name report	All preset vendor names are listed.
56	Idiom report	All preset idioms are listed.

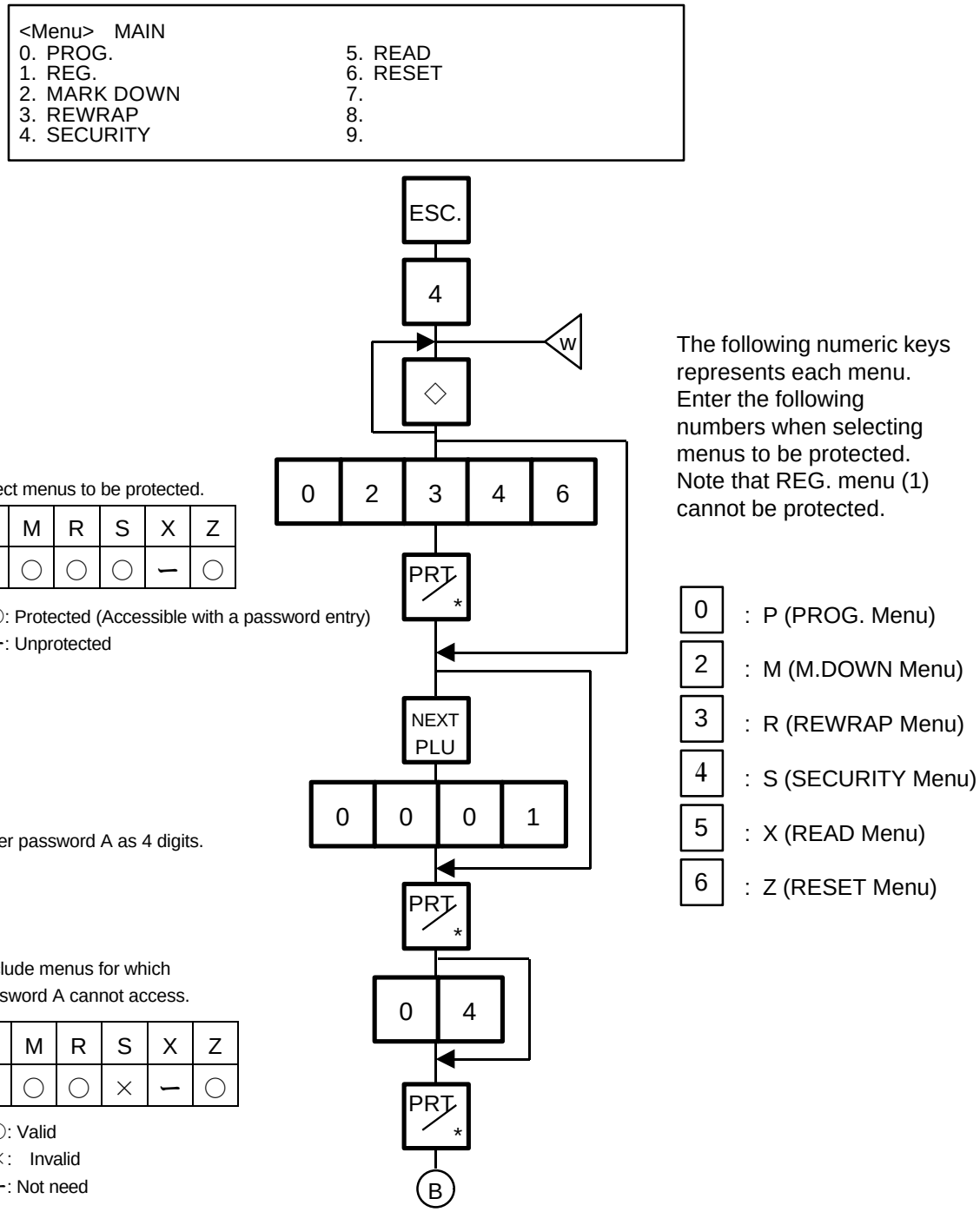
● Set the data range of each programmed data verification report



13. PASSWORD SECURITY

You can protect all menus (except REG. menu) and set two step passwords for access to protected menus.

13.1 SETTING PASSWORD AND PROTECT MENU

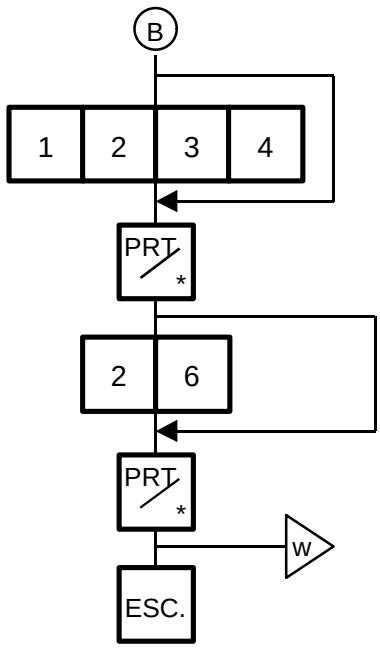


Enter password B as 4 digits.

Exclude menus for which password B cannot access.

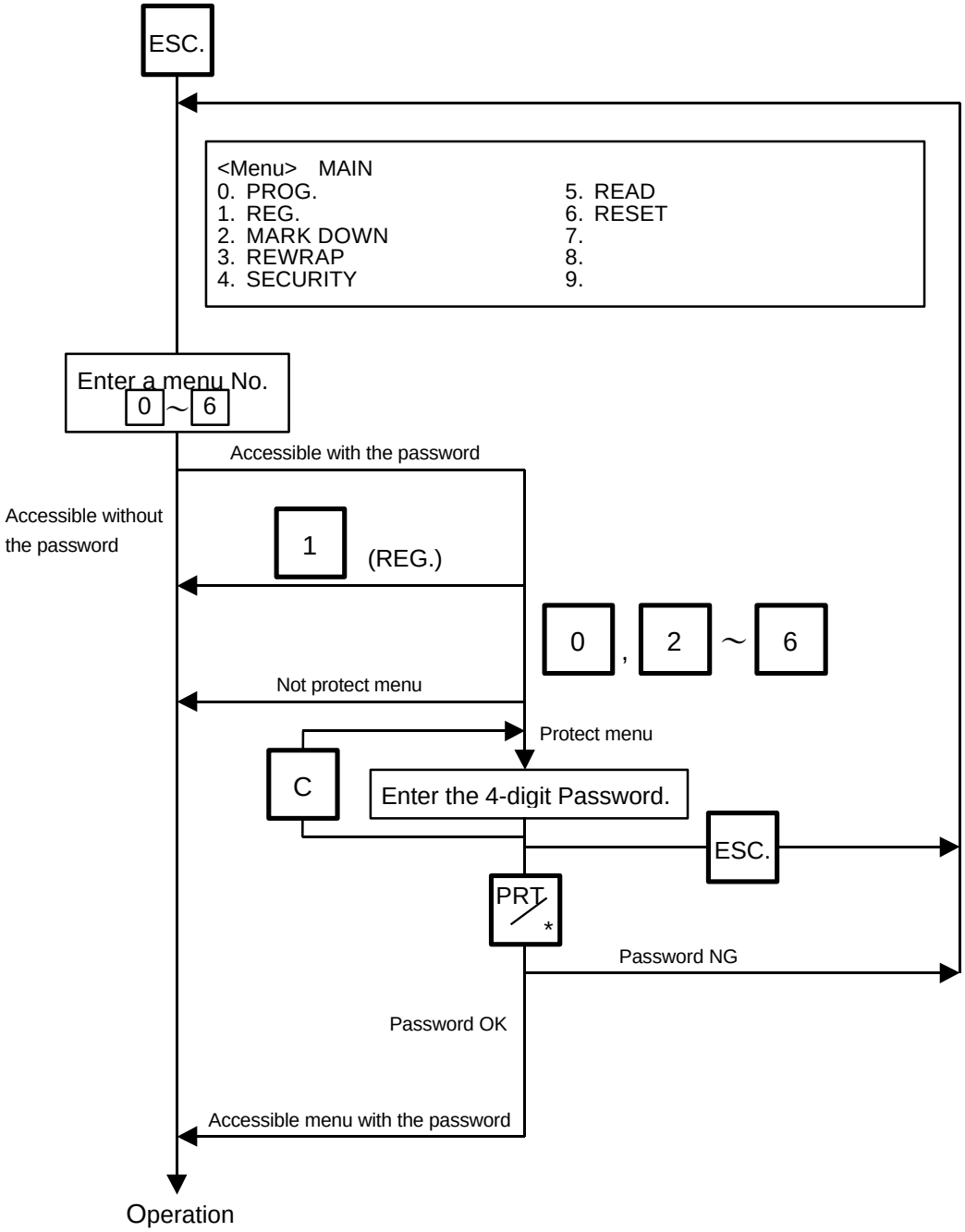
P	M	R	S	X	Z
○	×	○	○	ー	×

○: Valid
×: Invalid
ー: Not need



NOTES: *1. Select validity of the password by pressing the ◇ key*
2. When the same password is entered for password A and B, password A has priority over the password B.
3. Be careful if you exclude the same menu from the accessible menus with both password A and B, as you will not be able access the menu.

13.2 CALLING MENU BY ENTERING PASSWORD



NOTE: *When the password is unknown, enter "HELP" instead, and you can access only security menu.*

14. OPERATING PROCEDURES

■ NOTES BEFORE STARTING OPERATION

(1) Insert the power plug into the AC outlet and turn the power ON.
(2) A sixteen-second scanning will be performed after pressing the POWER key.
(3) Do not move the unit while it is in operation. Should it become necessary to move it at any time, turn the power switch to the OFF position and be sure to readjust the level indicator after relocating the scale.
(4) Should a power failure occur during operation, remove the commodity from the platter and insert the power plug into an AC outlet again when power is restored.
(5) If the scale is used with an unrated power source, inaccurate scaling or other errors may occur.
(6) If the zero point has shifted during scaling, and no tare is displayed, adjust the zero point by depressing the ZERO key.
(7) Check the date of the scale before operation every day.
(8) Make a test print before operation every day.
Press the TEST key, and the test label is issued.

■ How to access REG., M.DOWN, or REWRAP menu

The following display is the REG. menu display. When this display is shown after pressing the POWER key, you can start the REG. operation right away.

<REG.> MANU. WEIGH
ENTER THE PLU #

lb	UNIT/$	TOTAL $
0.000	P	000000

To access a menu from other menus, press the ESC. key to show the Main menu and enter the menu No. When the M.DOWN and REWRAP menus are protected, enter the menu No. and then the password.

<Menu> MAIN

0. PROG.	5. READ
1. REG.	6. RESET
2. MARK DOWN	7.
3. REWRAP	8.
4. SECURITY	9.

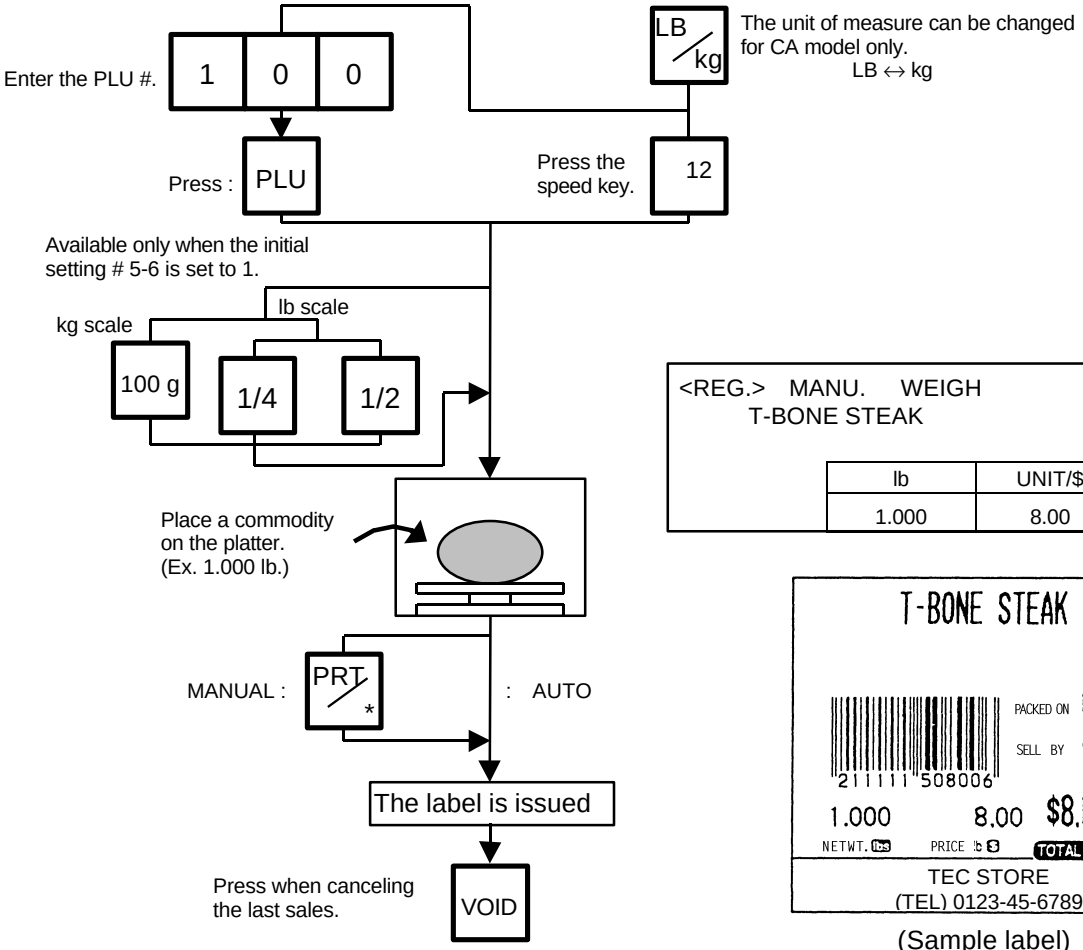
NOTE: *If a label nothing is printed or is issued after a printed label in batch mode, refer to Section 11.11 and press the* SET NEXT *key.*

14.1 WEIGHING OPERATION

Menu: REG., M.DOWN, or REWRAP
Mode: WEIGH

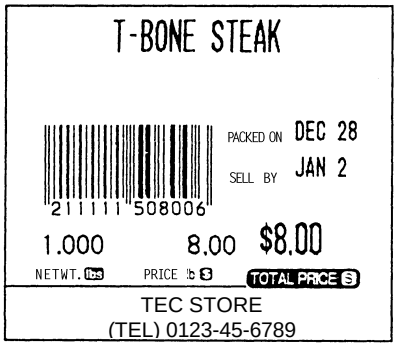
The weigh mode is used to weigh a commodity and to issue the label. The label contains data such as a weight, unit price (price per weight) and total price (calculated as a result of the weighing operation). The following is a basic operation seen at the sales floor of a store or at a back room where different kinds and weights of commodities are repacked. Pressing the **[VOID] key** subtracts the last entry from the memory.

Example) When PLU #100 and an unit price of $8.00 are set in the speed key #12.



<REG.> MANU. WEIGH
T-BONE STEAK

lb	UNIT/$	TOTAL $
1.000	8.00	8.00



(Sample label)

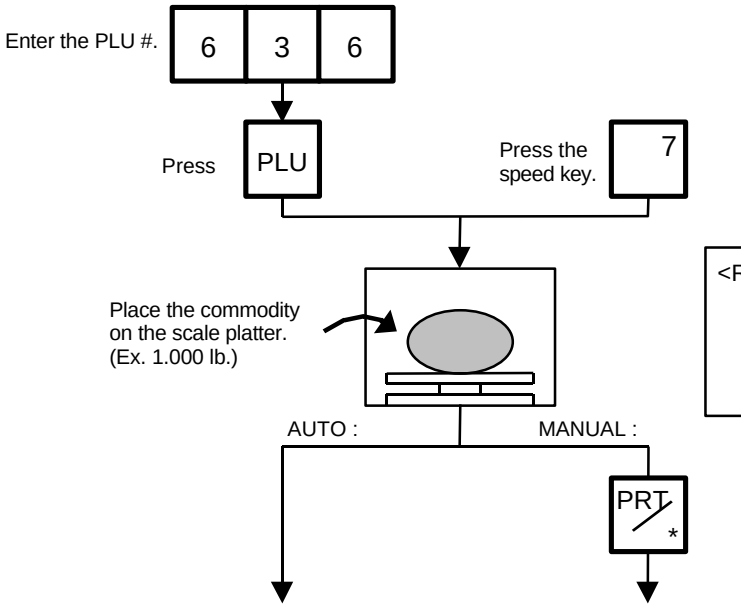
NOTES:

1. *Pressing a speed key to which no PLU data has been assigned will result in an error. In this case, press the* C *key, then press a speed key to which PLU data has been assigned.*
2. *To change between AUTO and MANUAL, follow the procedure provided in section 14.9.*
3. *If a unit price exceeding 4 digits is obtained by multiplying by 2 or 4 (when pressing the* 1/2 lb *key or* 1/4 lb *key), the unit price will be 0.*
4. 100 g *key is available only when the scale is a kg scale or operated on kg base.*
5. *When the* 1/2 lb *,* 1/4 lb *or* 100 g *key is pressed, the unit price does change on the display.*
6. *When the "compulsory tare" is selected, a tare must be subtracted in a weighing operation, otherwise an error message "TARE REQUIRED" will be displayed when the following operation has been done:*
   ① *Manual mode: Pressing the* PRT/* *key.*
   ② *Auto mode: Placing a commodity on the platter.*
   ③ *Floating vendor mode: Pressing the* Vendor *key.*
   When a "TARE REQUIRED" is displayed, refer to Section 14.6 to follow the proper weighing procedure.

14.2 FIX PRICE OPERATION (FOR US TYPE ONLY)

The FIX mode (Fix Price Mode) is used to issue a label for a commodity of a fixed price PLU (i.e. the price determined by the store), the weight of which may vary from commodity to commodity. In this mode, the Unit Price of the commodity looked up from the PLU file will be printed as the Total Price regardless of its actual weight, and the weight is also printed on the label.
Menu: REG., M.DOWN, or REWRAP
Mode: FIX

Example) In the case of PLU #636 of fixed price $3.80 which is assigned to speed key #7.



<REG.> MANU. FIX
SMOKED SALMON CHUNKS

lb	UNIT/$	TOTAL $
1.000		3.80

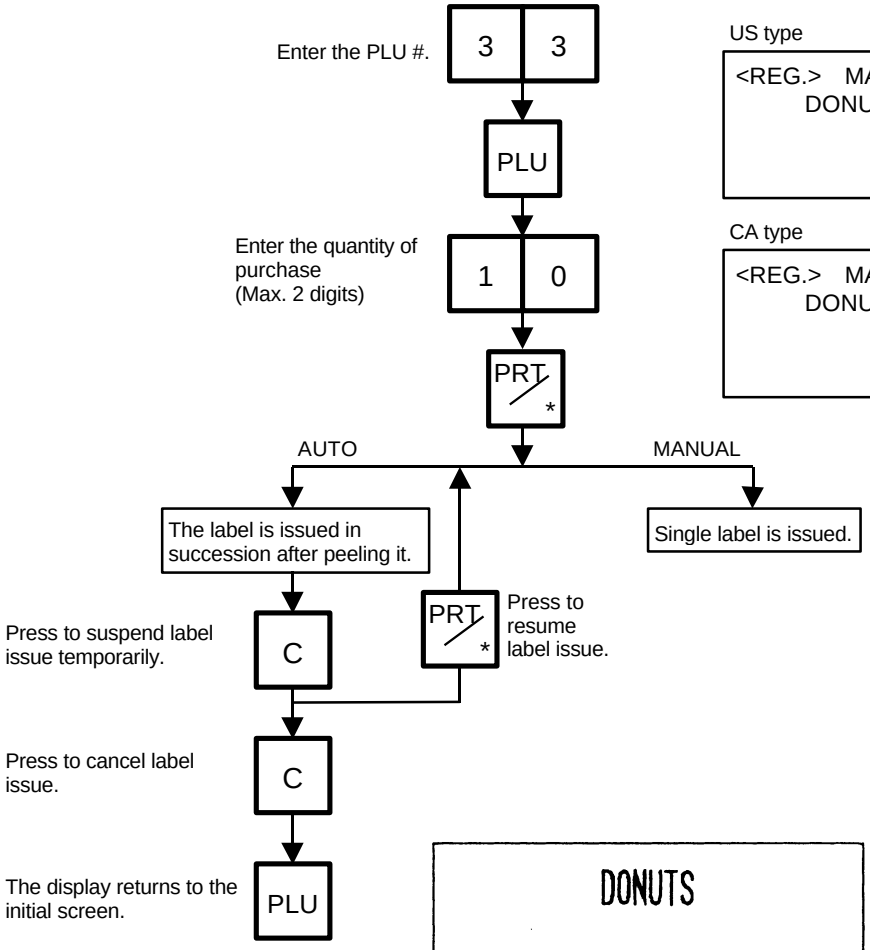
(Sample label)

14.3 BY COUNT OPERATION

The BY-COUNT mode is used to issue the label of commodities of the same kind in a package (or may not be packed). The whole package quantity (or a certain quantity) and the whole package price (or the price per the quantity) are usually preset. Thus, it is not necessary to weigh the commodities by the scale in such cases.

Menu: REG., M.DOWN, or REWRAP
Mode: BY-COUNT

Example) In case of purchasing 10 DONUTS for $1.50 of price for 4 DONUTS. (When a price of $1.50/4 DONUTS is set for PLU #33.)



US type

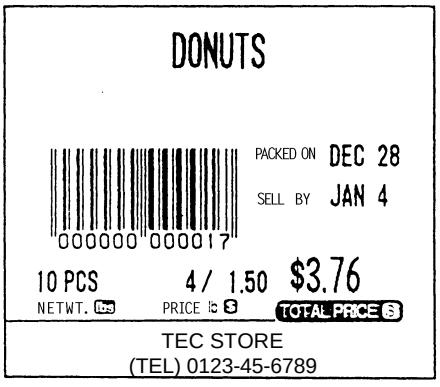
<REG.> MANU. BY-COUNT
DONUTS

PCS	UNIT/$	TOTAL $
10	4/1.50	3.76

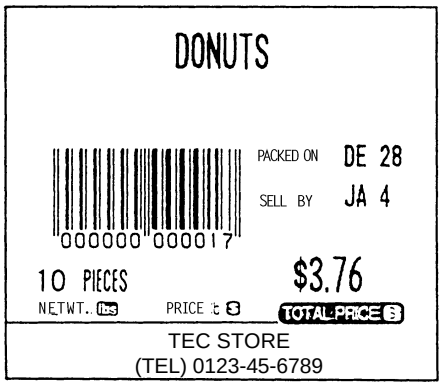
CA type

<REG.> MANU. BY-COUNT
DONUTS

Kg	$/Kg	$
----	P 10	3.76



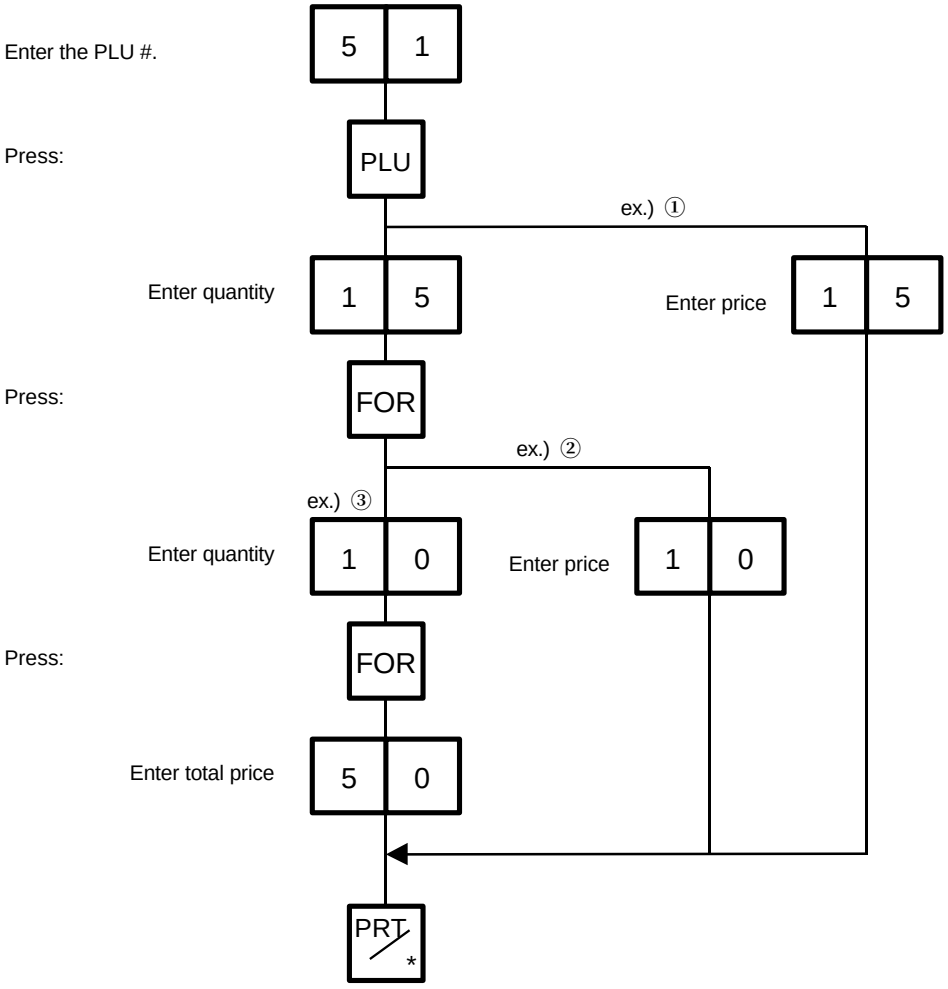
(Sample label for US type)



(Sample label for CA and QR types)

Example) An open price item can be sold as below:

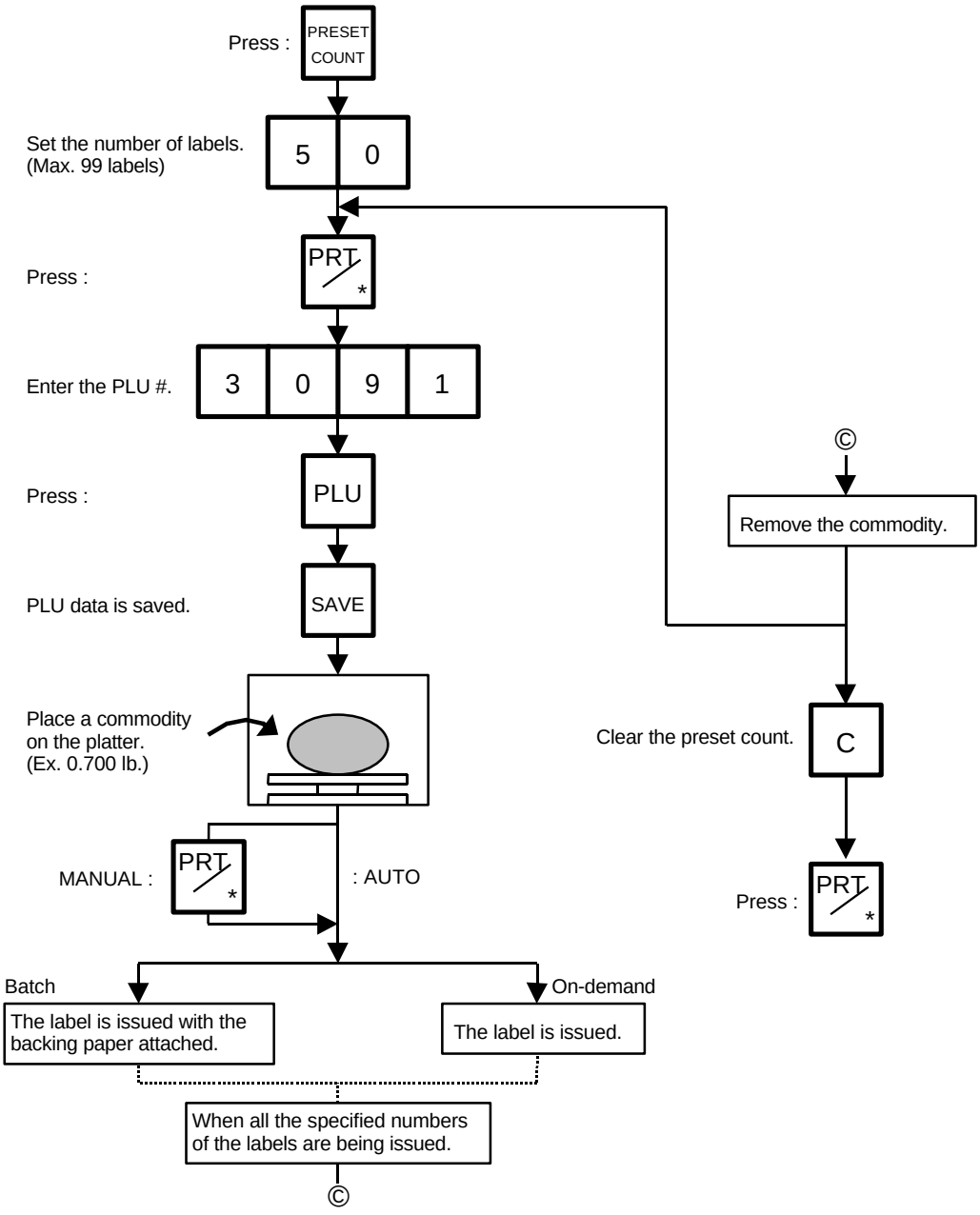
① 1 piece at 15 dollars
② 15 pieces at 10 dollars
③ 15 pieces sold at 0.5 dollars per 10 pieces



14.4 PRINT COUNT OPERATION

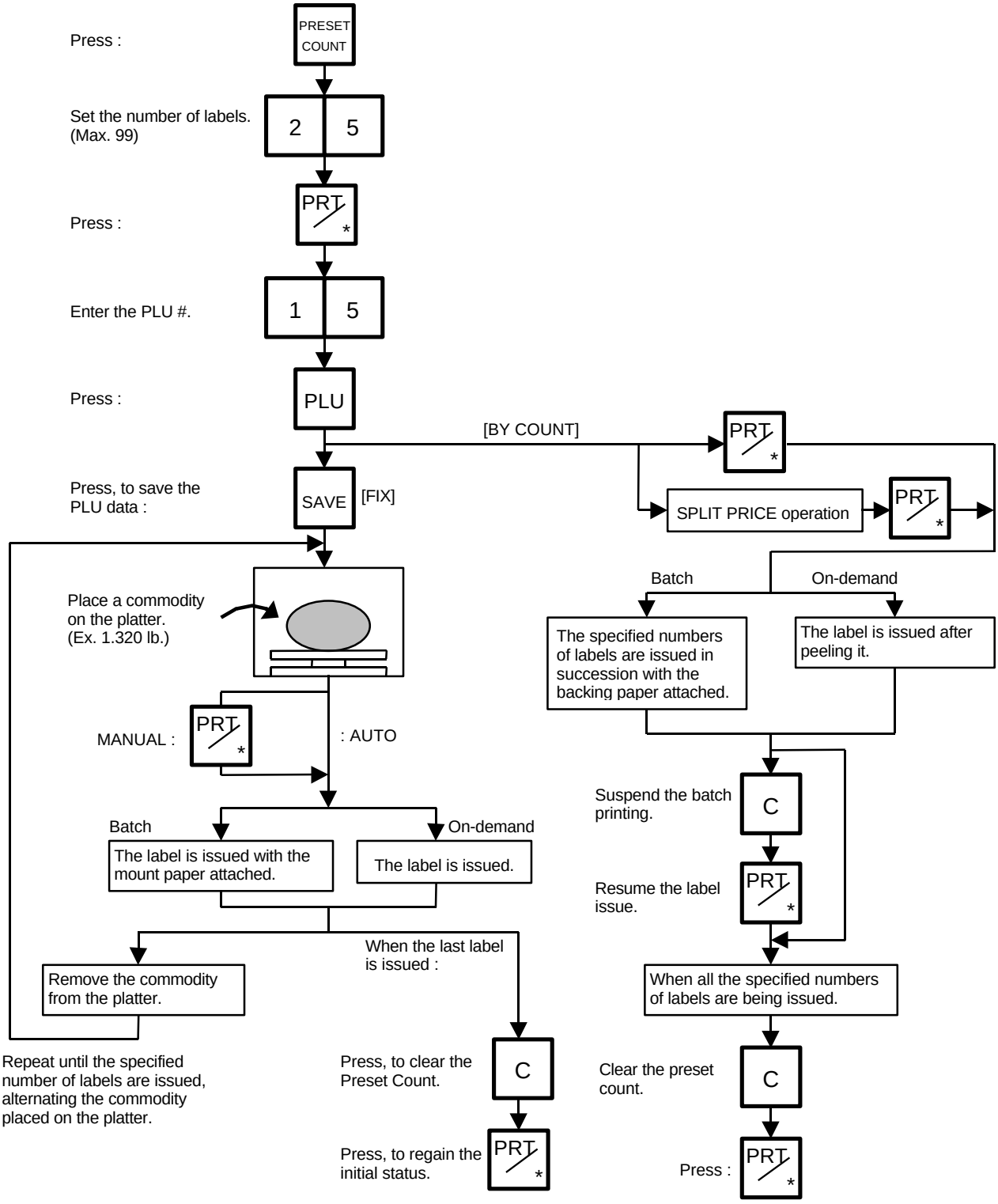
With this procedure, a specified number of the same labels can be issued.
Menu: REG., M.DOWN, or REWRAP
Mode: WEIGH, FIX or BY-COUNT

Example A) When operating in Weigh mode.

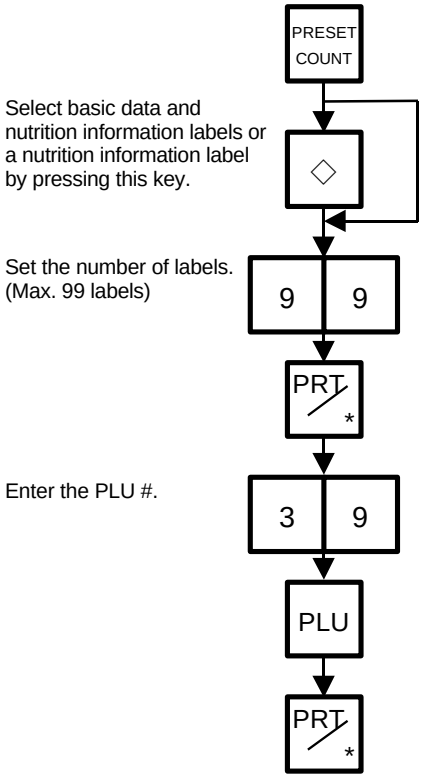


NOTES: *1. A batch issue means to print labels continuously with the backing paper attached. On-demand issue means to print label one by one.*
2. To check the remaining number, clear the PLU and press the PRESET COUNT *key.*

Example B) When operating in Fix or By Count mode.



Example C) When issuing only the nutrition information label. Note that nutrition information can be printed only on several types of label. Refer to Page 11-19.



The nutrition information label is issued in the following methods.

Table 8

Issue mode	Manual issue				Auto issue			
	On-demand		Batch		On-demand		Batch	
	Pre=0	Pre>=1	Pre=0	Pre>=1	Pre=0	Pre>=1	Pre=0	Pre>=1
Weigh	1	1	1	1	1	1	1	1
Fix (Weight/price)	1	1	1	1	1	1	1	1
Fix (Net weight)	1	1	1	1	1	1	1	2
By count	1	1	1	1	1	1	1	2

Pre : Preset count

1 : Issue method ①
After a basic data label is issued, a nutrition information label will be issued.

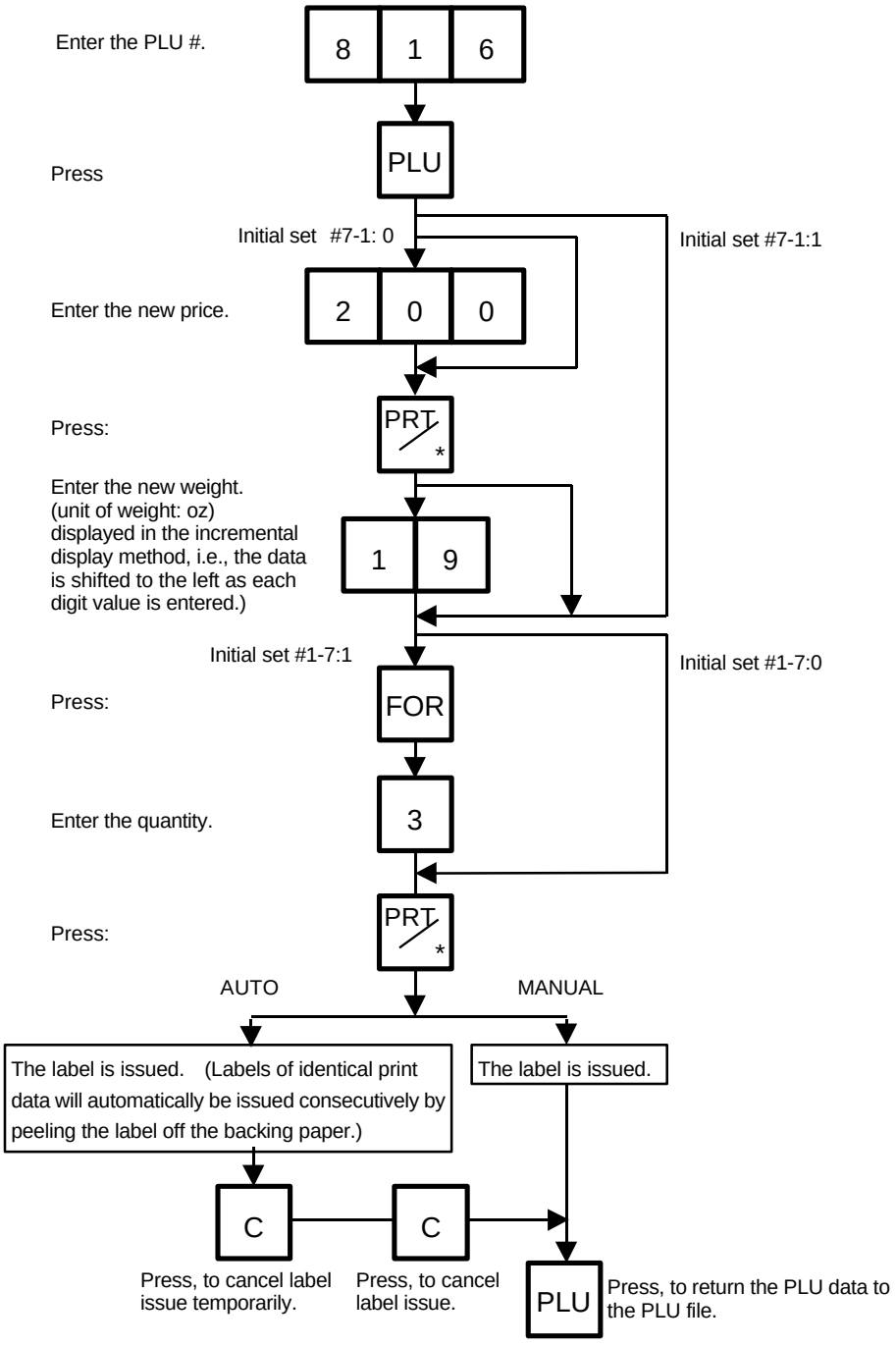
2 : Issue method ②
After the specified number of basic data labels are continuously issued, the same number of nutrition information labels will be issued. The number of labels can be specified with the preset count setting.

14.5 ISSUING LABELS WITH NET WEIGHT STATEMENT (FOR US TYPE ONLY)

Menu: REG., M.DOWN, or REWRAP
Mode: FIX

When the initial settings #1-7 and #1-8 are set to 1, a Net Weight Statement is printed on the label. A unit price and a tare registered in each PLU are printed as a price and a net weight.

Example) The preset Price is $2.10 and the preset Net Weight is 12 oz. The store knows that the actual Net Weight of this commodity is 19 oz. and decides to sell it at $2.00.



NOTES: *1. To print NET WT. data, from the FIX mode, load a label which has an area to print a NET WT. Statement.*

2. The quantity sold number and price data in NET WT. statement operation will be accumulated in the memory. No weight data will be accumulated.

3. The position of the decimal point is adjustable and a comma or period is selectable by the initial setting.

4. Weight data is shifted to the left.

5. Weight data exceeding 480 oz results in an error.

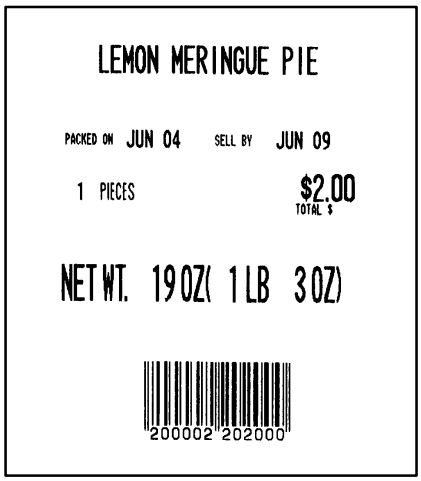
6. Unit price calculation system

(Step 1) Weight data is calculated from royal lb into decimal lb.
(Round off the data to two decimal places.)
ex.) 21 oz → 1.3125 lb → round → 1.31 lb

(Step 2) Price is divided by the value obtained above.
(Round off the data to two decimal places.)
ex.) 5 $/1.31 lb = 1.145 → round → $1.15/lb
This data is printed.

7. When the unit price is less than $0.01/lb or either the weight or price is 0, the unit price will not be printed.

8. Multiplication registration of NET WT. statement
The maximum quantity of a commodity is 99.
In the following cases, an error occurs when pressing the PRT/* *key to issue the label.*
(1) Quantity = 0
(2) Price × quantity > max. price
weight × pieces > max. tare (30lb scale: 480 oz, 15 Kg scale: 9.995 kg)

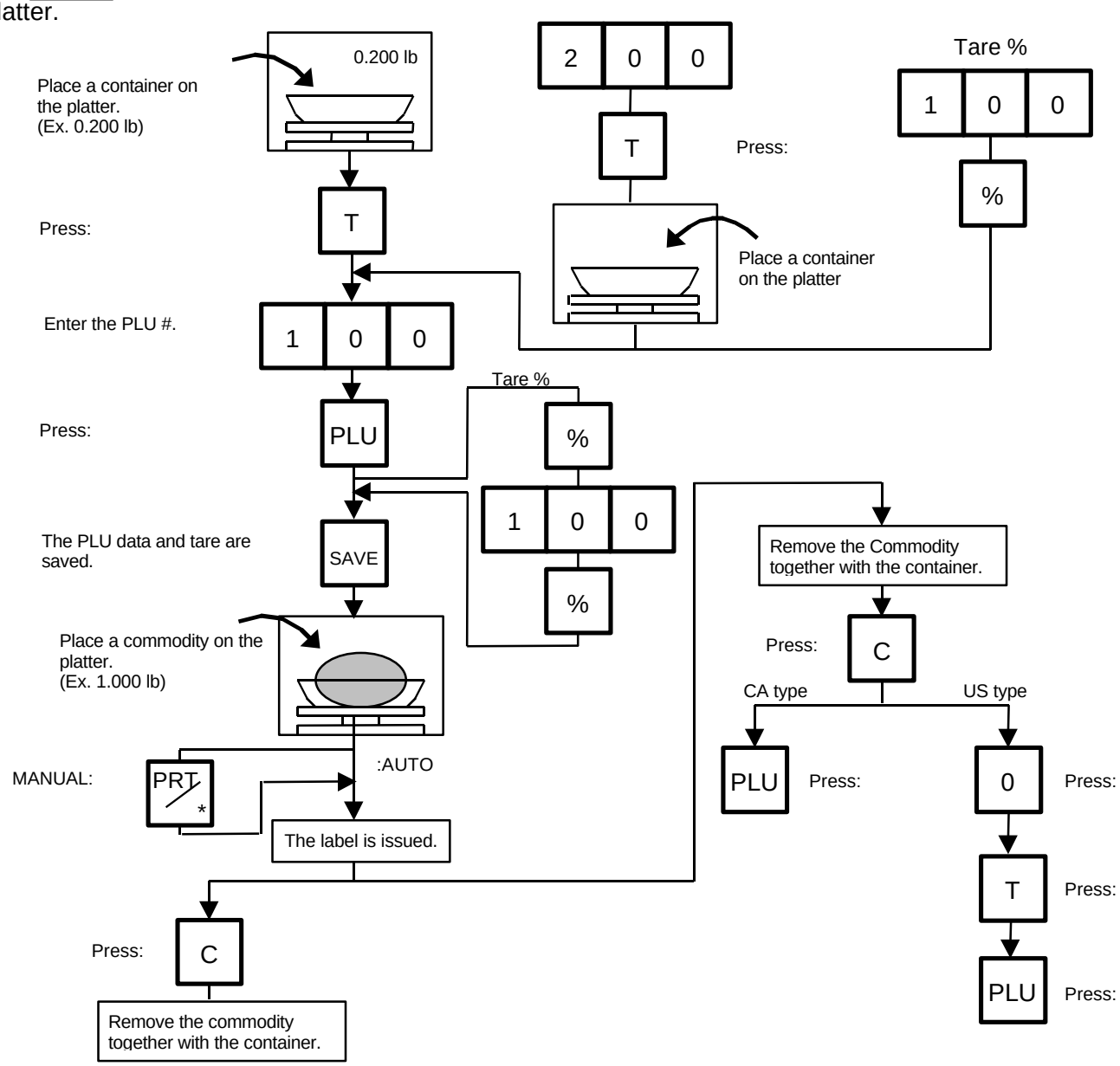


(Sample label)

14.6 TARE/SAVE FUNCTION PROCEDURES

Menu: REG., M.DOWN, or REWRAP
Mode: WEIGH or FIX (Tare % function is available in WEIGH mode only.)

There aretwo kinds of tare subtraction procedures, one is “Direct tare”, the other is “Preset tare “.
The SAVE key is used to save the tare, unit price, and PLU data after taking a commodity from the platter.



NOTES: *1. Tare subtraction is available up to 2.000 lb. for the US type, and up to 1.000kg (2.205lb) for the CA/QR type. When tare subtraction is in operation, however, the scalable range for net weight becomes less by the amount of the tare. (**Net weight-Gross weight-Tare**)*

2. Preset tare must be a multiple of 2 g for CA/QR type (Kg scale) and a multiple of 0.005 lb for US/CA type (Lb scale).

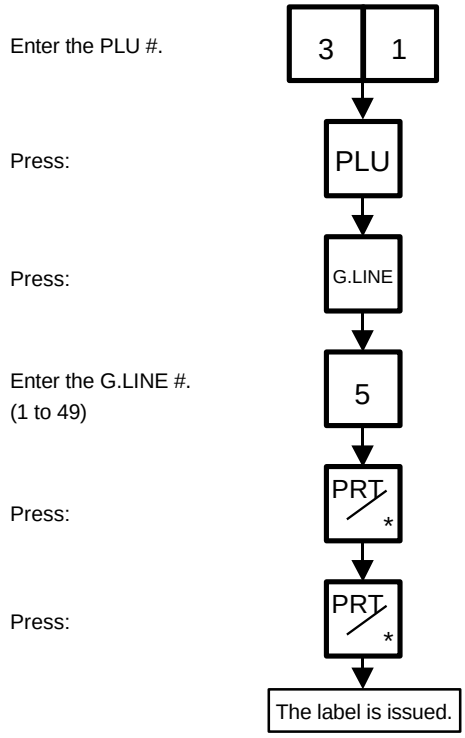
3. The tare % function is available when the Initial Setting #8-7 is set to 1 (SL-9000) or #28-4 is set to 1 (SL-9000N). The speed key #70 will function as the % key (Refer to page 5-3). Set a tare % within the range from 0.0 to 99.9.

4. When a commodity is placed on the platter and the calculated tare exceeds the maximum, a “TARE WEIGH OVER” error will occur.

14.7 CALLING AND PRINTING GRADE LINES

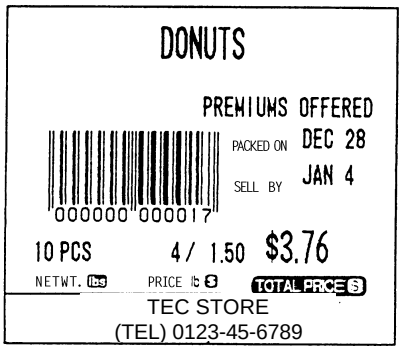
A grade line is a short message added to a commodity name.
A grade line can be selected from maximum of 49 programmed grade lines and printed on the label.

Menu: REG., M.DOWN, or REWRAP
Mode: WEIGH or FIX, or BY COUNT



<REG.> MANU. BY-COUNT
PREMIUNS OFFERED ← Grade Line
DONUTS ← Commodity Name

PCS	UNIT/$	TOTAL $
10	4/1.50	3.76

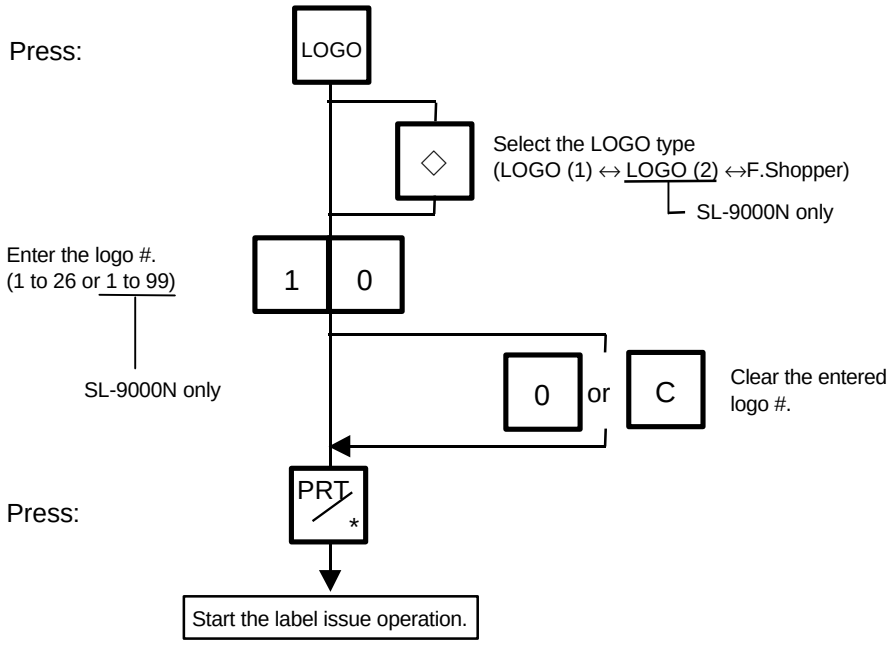


(Sample label)

14.8 CALLING AND PRINTING LOGOS

When the initial set #10-7 is set to “1” (or “2”: SL-9000N only), a logo containing a picture, a mark, a POP message, etc., can be printed on the ingredient label having 12 lines or more.
Logo data is created on the PC and stored into the memory through the CMT/PL-3 interface.

Menu: REG., M.DOWN, or REWRAP
Mode: WEIGH, FIX, or BY COUNT



NOTES: *1. The logo # will be effective until it is changed or deleted. (Logo # is still effective after turning power off and/or changing mode.)*
2. Pressing PRT/* *key returns the display to the initial display of Weight mode. This clears the unit price and tare data.*
3. LOGOs will not be printed together with a safe handling instruction on a label.
4. LOGOs will be printed in the center of a label.
5. LOGO # “1 to 26” or “1 to 99” is selectable with the initial setting #10-7. (SL-9000N only)

14.9 SELECTING PRINT ITEM

Menu: REG, M.DOWN, or REWRAP
Mode: WEIGH, FIX, or BY COUNT

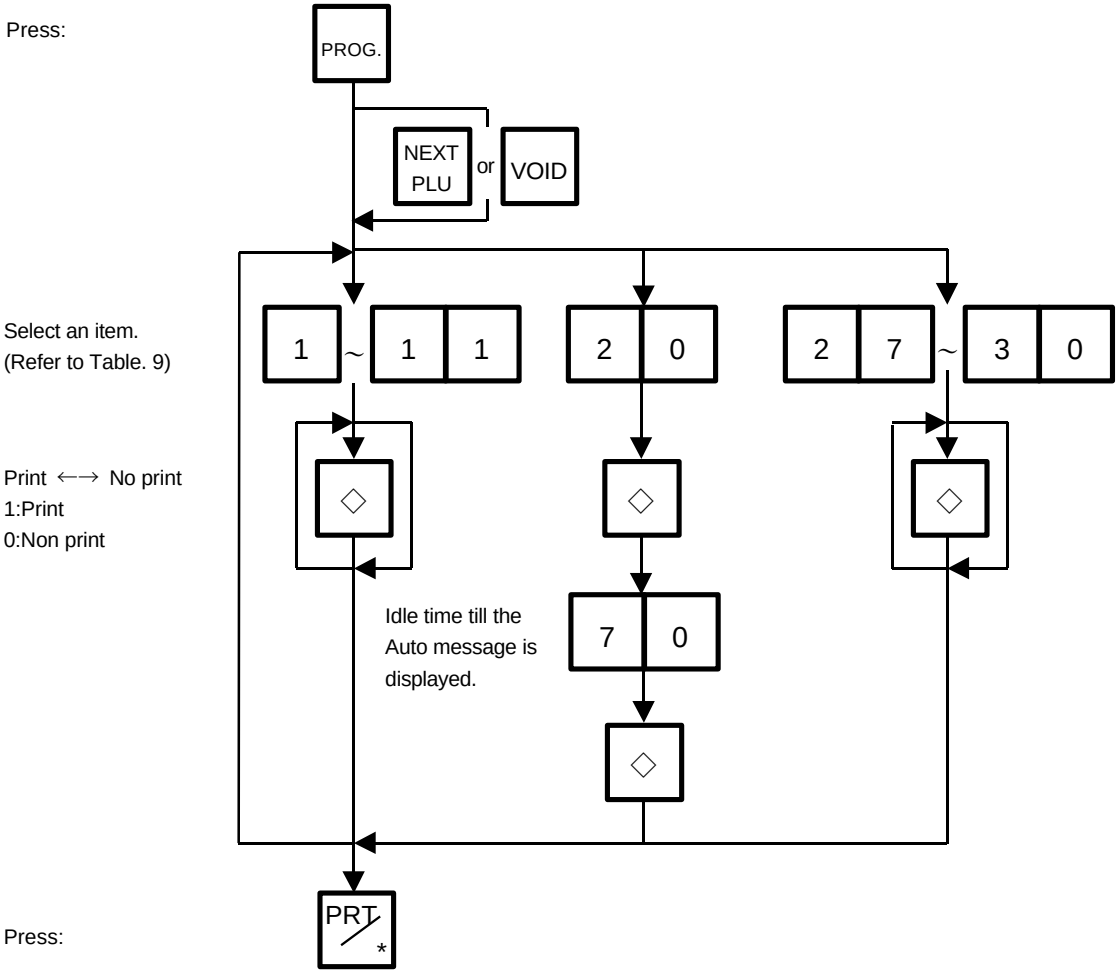


Table 9

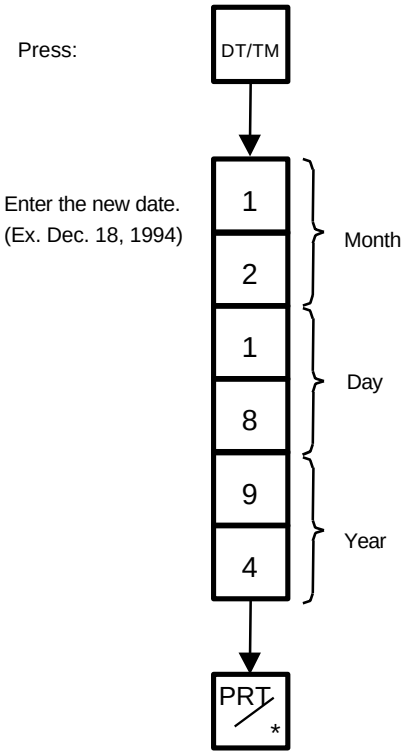
Entry	Item		Entry	Item	
1	Packed on date	Print/Non Print	9	Piece count	Print/Non Print
2	Sell by date	Print/Non Print	10	Cooked by date	Print/Non Print
3	Commodity name	Print/Non Print	11	SP/Info./Net Wt.	Print/Non Print
4	Weight	Print/Non Print	20	Auto message timer	0～99 sec.
5	Unit price	Print/Non Print	27	Media selection	Label/Receipt
6	Total price	Print/Non Print	28	Print format	Format No. Selection
7	Barcode	Print/Non Print	29	Mode (2)	weight/Fix/By count
8	Ingredient	Print/Non Print	30	Mode (1)	Auto/Manual

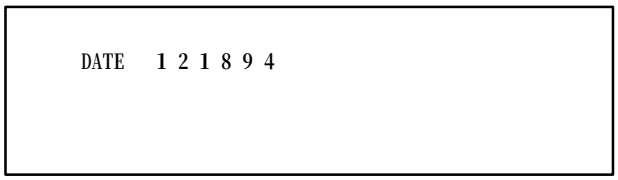
NOTES: *1. A store code can be printed in place of a "packed on date" and "sell by date" by changing the initial settings #6-5 and #6-6.*
To print a store code, select "packed on date" or "sell by date" as a print item using the above procedure.
2. The print of "packed on time" with alphabetical code can be selected with the Initial setting #6-6. (SL-9000N only)
3. Setting data will not be changed by turning the power off, changing the mode or calling a PLU.
*4. The **[0] key** has no function.*
*5. Pressing the **[C] key** allows you to return to the step of selecting the "packed on date".*
6. The range of idle time=0 to 99 seconds. A setting "0" prohibits display of an auto message.
7. Item 29 is operable only when the initial setting #1-5 is set to "0".
*8. Be sure to press the **[FEED] key** after the **[PRT/*] key** when changing the label format.*

14.10 DATE CHANGE

The date can be changed temporarily.

Menu: REG., M.DOWN, or REWRAP
Mode: WEIGH, FIX, or BY COUNT



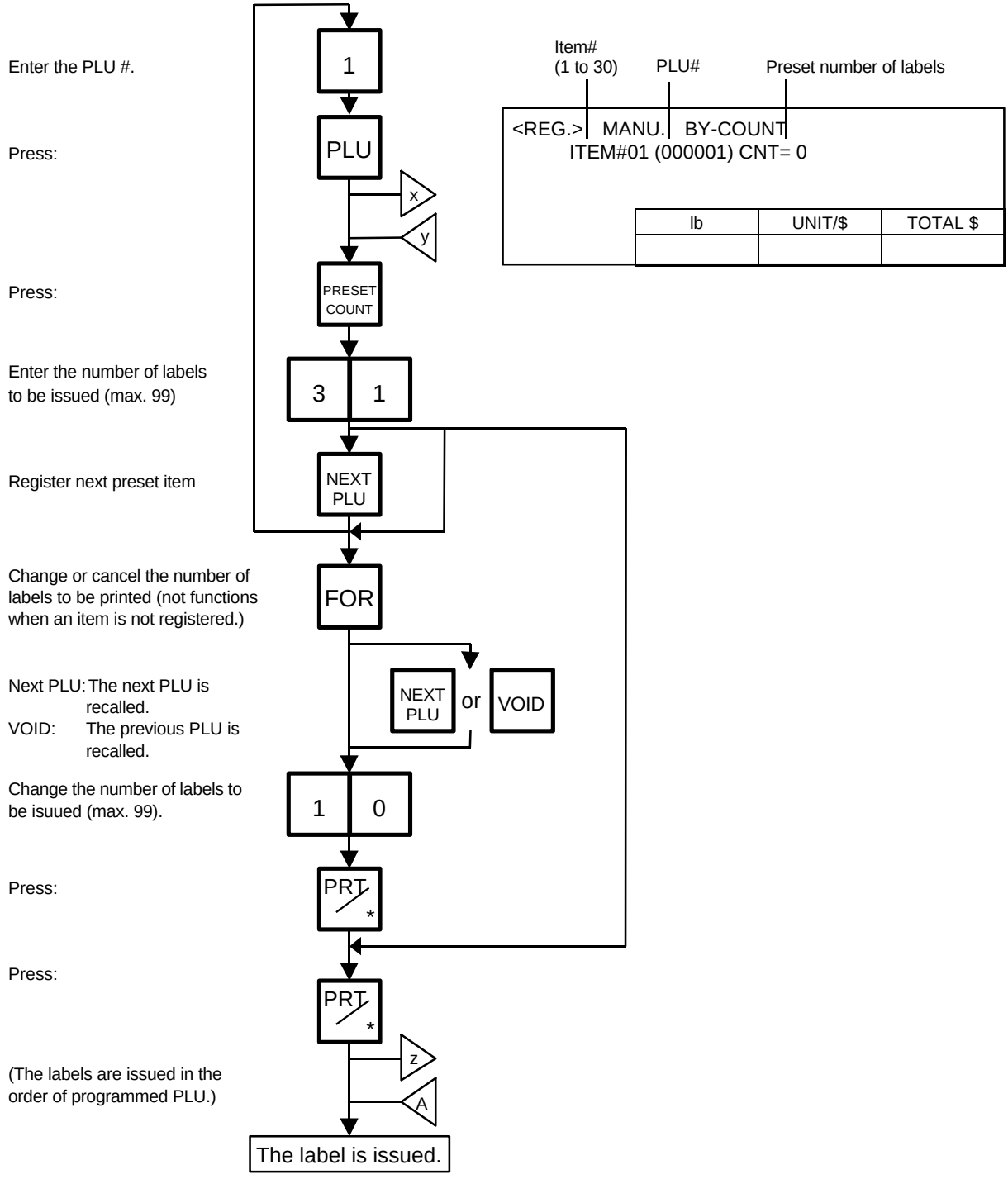


NOTE: *The scale will check the details of the date input. An invalid date will result in an*

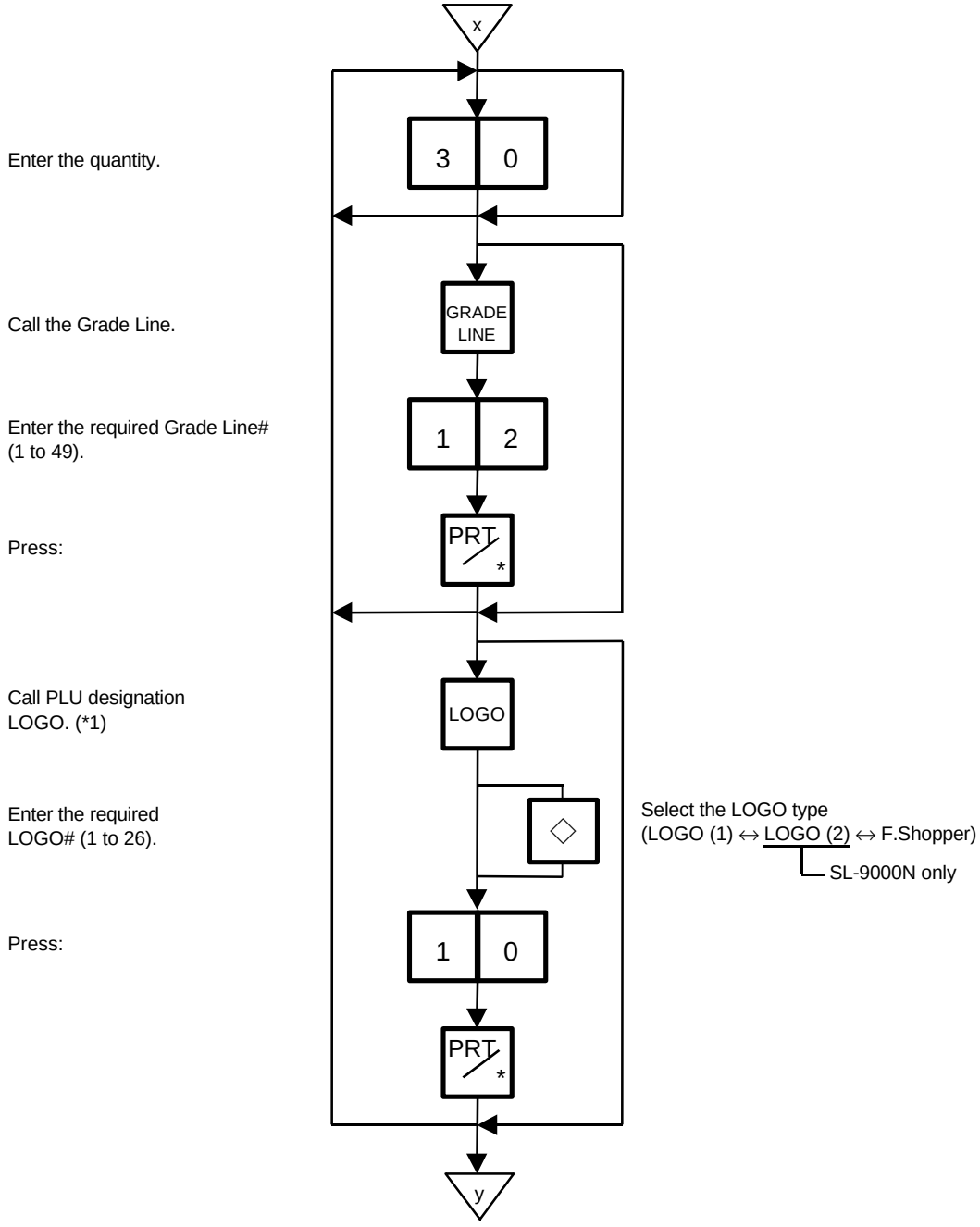
14.11 BATCH PRINT MODE (with 30 Items Run Assignment)

Menu: REG., M.DOWN, or REWRAP
Mode: FIX, or BY COUNT

Up to 99 labels per PLU can be issued in non-scale mode. Up to 30 items can be preset. (However, 0 is preset, issuing will be canceled.)

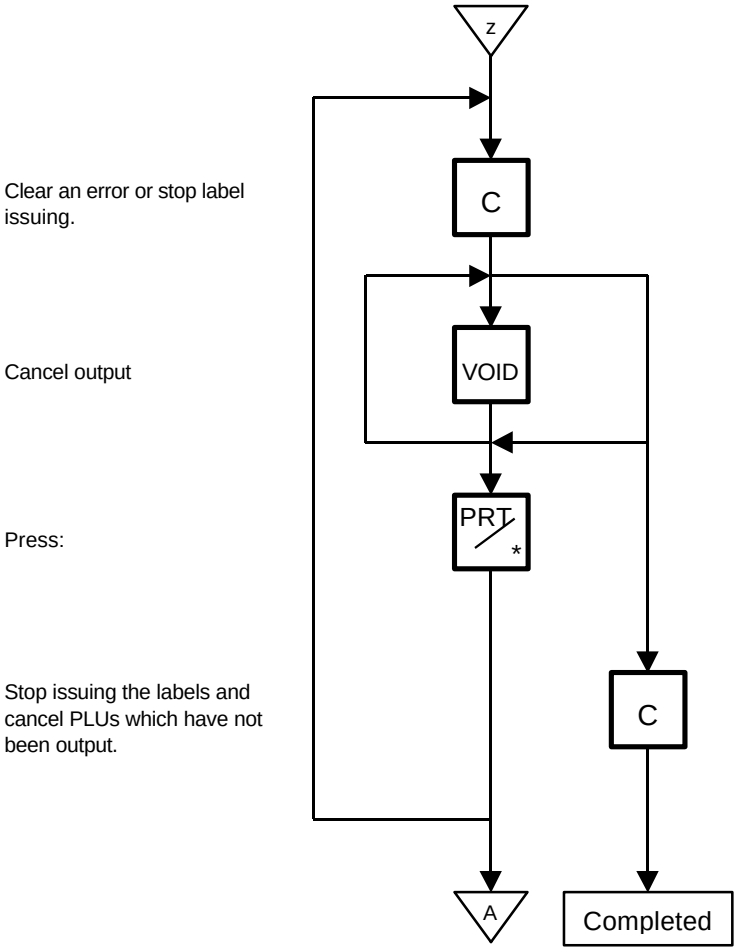


● Unit Price Change and G.Line/LOGO Call



*1 By calling the PLU designation LOGO, the LOGO can be designated per PLU and printed. When the PLU dose not designate the LOGO, the LOGO programmed before entering Batch Print Mode is printed.

● Label Issue Stop or Cancel

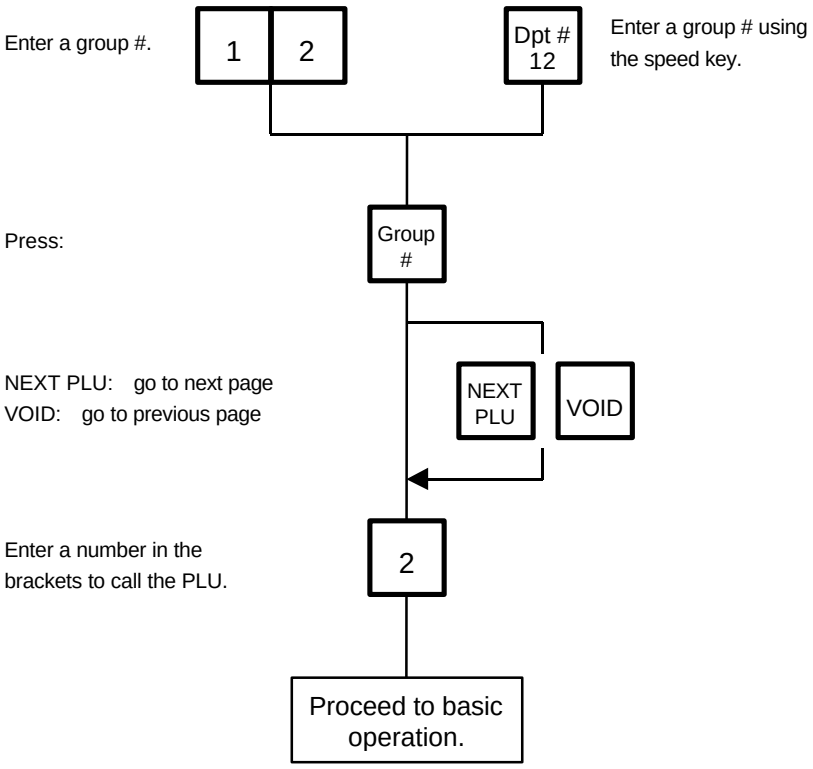


NOTES: 1. When the label for NET.WT statement is not selected, pressing the PRESET COUNT key in FIX mode results in an error.
2. Programmed items are reset when:
   ① the power is off.
   ② changing the munu. (PROG./REG)
   ③ changing the mode. (weight/by count/fix)
   ④ batch printing has been finished.
3. Pressing the PRESET COUNT key to preset the 31st item results in an error.
4. The LOGO and Grade Line called per PLU cannot be changed.
5. The label issued in Batch Print Mode cannot be corrected using the VOID key.
6. “TOTALS OVERFLOW” error occurs when the PRINT key is pressed to issue each PLU label.

14.12 VISUAL COMMODITY LIBRARY

Menu: REG., M.DOWN, or REWRAP
Mode: WEIGH, FIX, or BY COUNT

In the following procedure, entering a group # (the upper two digits of PLU#) allows you to call 6 commodities which belong to the group. This function is convenient when calling a commodity which PLU# you do not know.

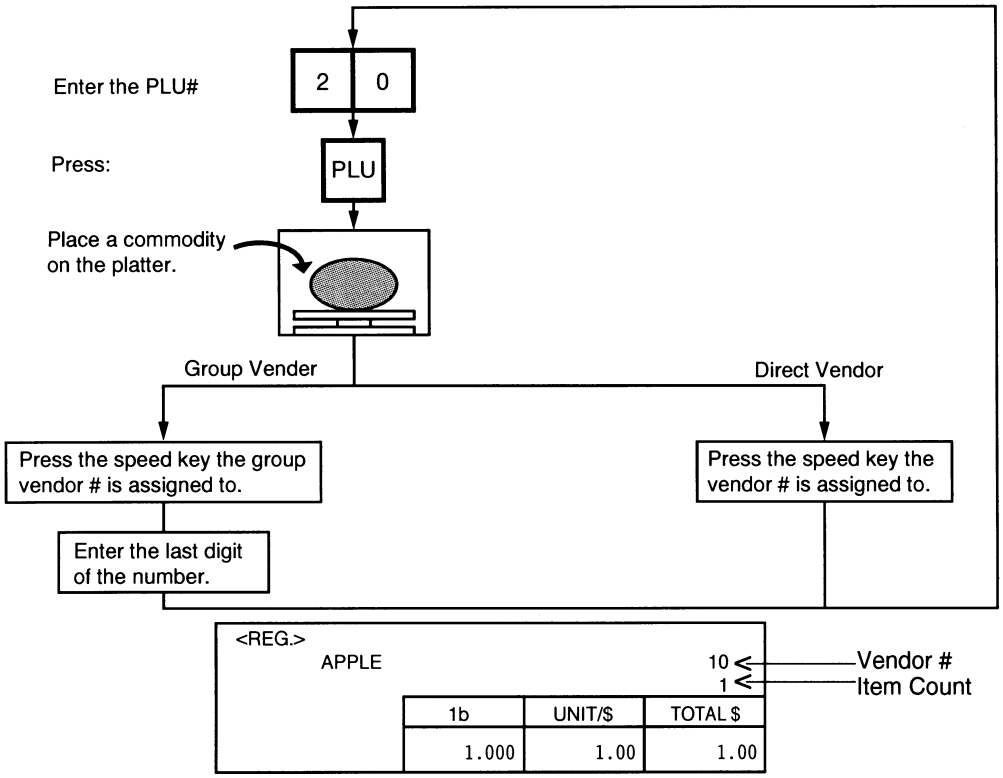


14.13 FLOATING VENDOR

Menu: REG
Mode: WEIGH, FIX, or BY COUNT

Floating vendor function allows you to register different commodities sales together. This function is available when the Initial Setting #11-1 is set to 1 and using a receipt.
Be sure to select IN-LINE in Section 11.15 LON SYSTEM even if no scale is connected, then enter the ID# 1, turn the power off and then on.

Maximum number of registerable commodities
One scale: 200 commodities
One vendor: 99 commodities



NOTES: *1. Print format varies depending on the settings of the Initial Setting #11-1, 11-2, 11-3, 11-4 and 11-7.*

2. Care must be taken for the following when a clerk label is printed.

(1) Cleark labels can not be used with Floating Clerk (receipt) in a system.

1) The clerk accumulation memory is used for the Flloating Clerk's.
The clerk accumulation memory is used for the same system, the registered data by Floating Clerk (receipt use) and Clerk labels eill be stored into the same memory.

(Sample label)

(2) Restraints in case of clerks' name printing on labels

1) "GRADE LINE" can not be selected and printed.

2) Commodity name can not be printed on the 4th line of 57 mm eidth label and 2nd line of 48 mm width label, because 1 line of commodity is used for clerk's name printing.

3) The printing position of clerk name will be selected by the initial setting for GRADE LINE position.

Initial 3-6 (G. Line Print Position)

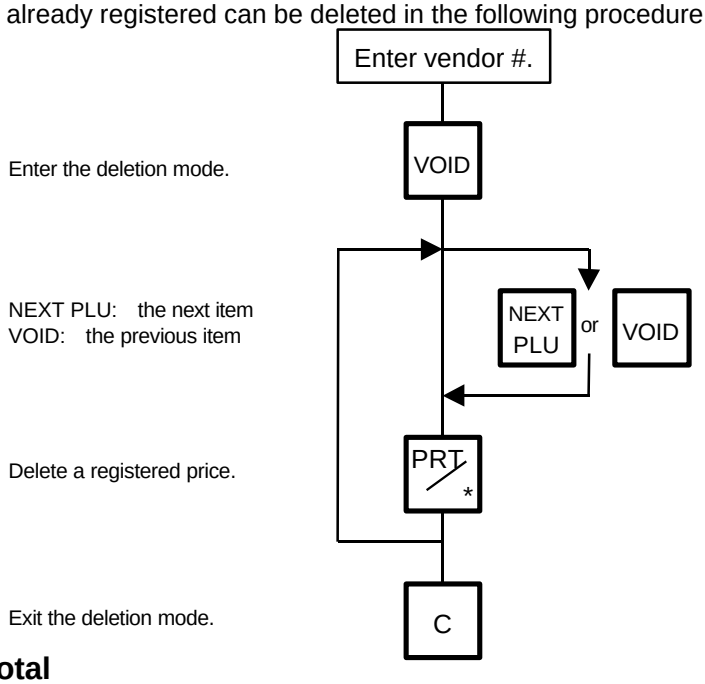
0: Right side on bottom line of commodity name

1: Left side on bottom line of commodity name

If you would like to switch the initial setting # please contact your authorized TOSHIBA TEC representative.

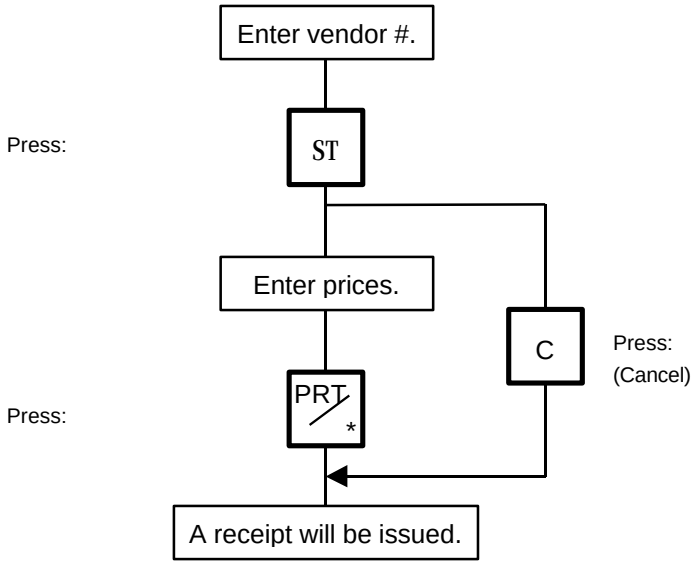
■ Price deletion

Prices already registered can be deleted in the following procedure.



■ Subtotal

The following procedure will sum up all of the registered items.

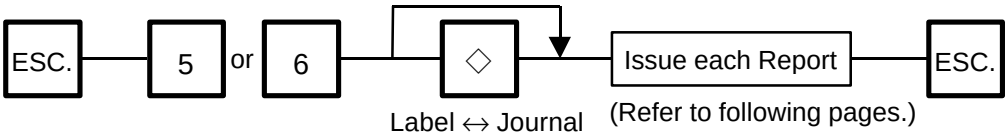


15. TOTAL OPERATION

15. TOTAL OPERATION

In Read or Reset mode you can issue a sales report or reset report with either a label or journal paper.

Menu: READ or RESET
READ
The totals will not be cleared as they are printed on labels or journal paper.
RESET
The totals will be cleared as they are printed on labels or journal paper.



No.	ITEM	READ	RESET	JOURNAL	LABEL
0	HOURLY TOTAL	○	○	○	○
1	GRAND TOTAL	○	○	○	○
2	PLU TOTAL	○	○	○	○
3	VENDOR TOTAL	○	○	○	○

■ How to access READ or RESET menu

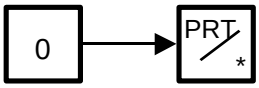
The following main menu is displayed after pressing the ESC. key. Enter '5' to enter the READ menu or '6' to enter the RESET menu. When those menus are protected, enter the menu No. and the password.

```
<Menu>  MAIN

0.  PROG.          5.  READ
1.  REG.           6.  RESET
2.  MARK DOWN      7.
3.  REWRAP         8.
4.  SECURITY       9.
```

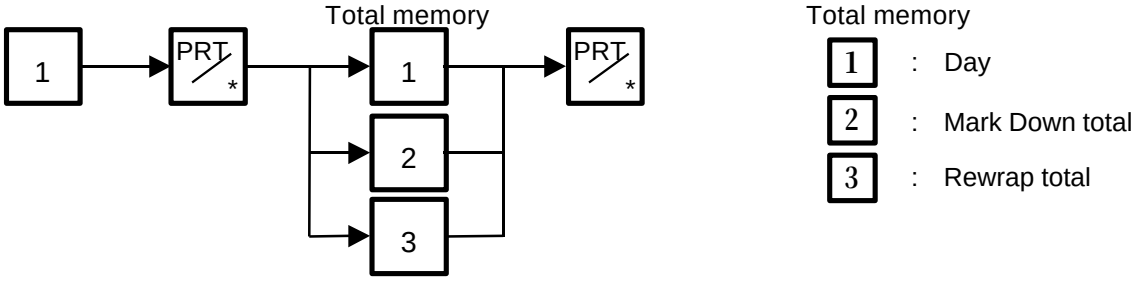
15.1 HOURLY TOTAL REPORT

Ex.) REPORT Menu

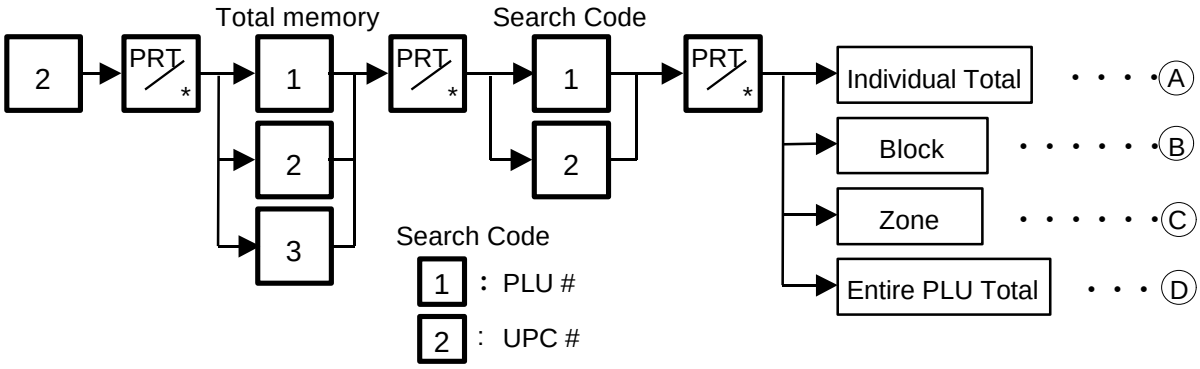


NOTES: *1. When issuing an hourly report, hours with no sales are not printed.*
2. An hourly report is printed as follows:
1) Label: Issued sequentially in on-demand mode.
2) Journal paper: Issued with journal paper.
3) Label with backing paper: Issued sequentially in batch mode.
*3. If the **[C] key** is pressed during issuance, the hourly report being printed will complete, then the total report will be issued. If this is done in Reset mode, the print data is cleared to zero.*

15.2 GRAND TOTAL REPORT

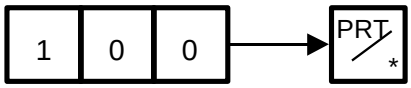


15.3 PLU TOTAL REPORT



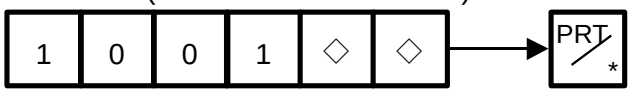
Ⓐ Individual Total

Ex.) Individual PLU Total (PLU #100)



Ⓑ Block Total

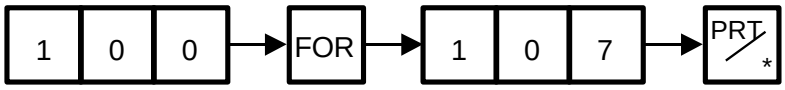
Ex.) UPC Block Total (UPC #100100～100199)



***NOTE**: The ◇ key represents 0 through 9. The most significant digit in the starting number is followed by an appropriate number of ◇ keys.*

Ⓒ Zone Total

Ex.) PLU Zone Total (PLU #100～107)



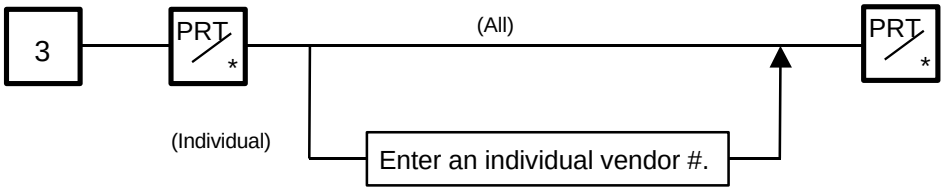
Ⓓ Enter PLU Total

***NOTES**: 1. When setting the PLU zone, it is not necessary to enter a beginning number which is smaller than an end number.*

2. When issuing a block or a zone total report, a PLU with no sales record is not printed. If all PLUs of the block or zone have no sales record, only the total is printed.

3. Pressing the C key in the middle of issuing a reset report stops printing and data is not cleared.

15.4 VENDOR TOTAL REPORT



16. ERROR MESSAGE TABLE

16. ERROR MESSAGE TABLE

WARNING!
If you annot solve the problem with the following solution instruction, do not attempt further trouble shooting, by yourself. Turn the power off, unplug the printer, then contact your Authorized Service representative for assistance. *Do not attempt to repair or adjust alone, because electrical equipment is dangerous.*

Take the following action if an error message has appeared on the commodity name display along with the buzzer sounding.

● **Programming Mode**

Message	Cause	Solution
DATA ENTRY ERROR	Error in key input.	Press the CLEAR key, and re-input the right data.
MEMORY FULL	No memory space to set PLU.	Press the CLEAR key, and delete unnecessary PLUs.
DUPLICATE PLU	The PLU # being changed is already registered.	Press the CLEAR key, and check the PLU.
PLU NOT FOUND	The PLU # being called out is not registered.	Press the CLEAR key, and set the data to free PLU#.
CHARACTER OVERRUN	Attempt is made to set more than max. allowed number of characters.	Press the CLEAR key, and re-input the right data.
PRT FAILURE DETECTED	Printer trouble.	1. Check that the label and print head are set correctly. 2. If the label home position is misaligned, press the FEED key.
LABEL OVERRUN	Label overruns.	Press the FEED key.
RESTORE THE PLUS	The capacity of RAM was changed with the ingredient data stored.	Press the CLEAR key and save the ingredient data. Then delete the data from the memory of the unit. After that change the capacity of RAM and load the data to the unit.

16. ERROR MESSAGE TABLE

● Label Issue Mode

Message	Cause	Solution
DATA ENTRY ERROR	Error in key input.	Press the C key, and re-input the right data.
PLU NOT FOUND	The PLU # being called out is not registered.	Press the C key, and check the PLU #.
TOTALS OVERFLOW	GRAND TOTAL or PLU TOTAL memory has been exceeded at the time of issuing a label.	Press the C key, then the ESC. key and select ‘RESET’. Then sum up the exceeded memory.
MEMORY WILL BE FULLED	The machine judges the memory is full before designated number of media are printed in Batch mode.	Press the C key, then the ESC. key and select ‘RESET’. Then sum up the exceeded memory.
PLU DATA ERROR	Error in the PLU data.	Press the C key, and reprogram PLU data.
PRT FAILURE DETECTED	Printer trouble. Media end.	1. Check that the label and print head are set correctly. 2. If the label home position is misaligned, press the FEED key.
LABEL OVER RUN	Label overruns.	Press the FEED key.

● Report and Reset Mode

Message	Cause	Solution
PLU NOT FOUND	Corresponding PLU # is not registered.	Press the C key, and enter the correct PLU #.
PRT FAILURE DETECTED	Printer trouble.	Same as in the label issue mode.
LABEL OVER RUN	Label overruns.	Press the FEED key.

16. ERROR MESSAGE TABLE

● CMT Operation Mode

Message	Cause	Solution
MISMATCH SCALE SPEC	Mismatch of the model type.	Press the CLEAR key.
	Mismatch of the base unit.	
	Mismatch of the VERSION.	
	Mismatch of the TRANSMITTING DATA.	
	Mismatch of the scale capacity.	
BAD TAPE OR CMT	Parity error	Press the CLEAR key.
	Framing error	
	Overrun error	
	Data error	
	Two or More Hardware error	
TIME OUT ERROR	Time out error	Press the CLEAR key.

● LON System Mode

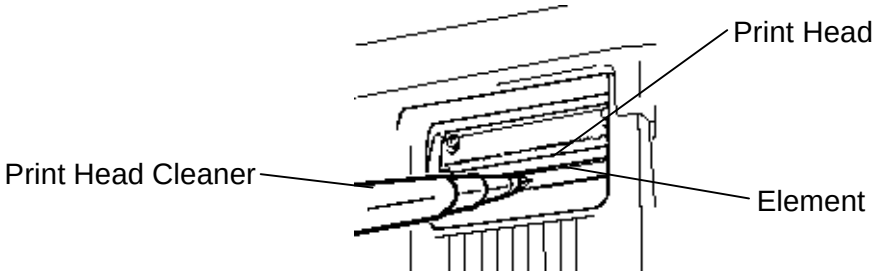
Error message	Cause	Solution	M	BM/S
COMMUNICATION ERROR	1. The power of the master or backup master scale is not turned ON. They are not connected with each other or in off-line state. 2. LON cable is broken.	1. Turn the power of the master or backup master scale ON. Connect them with each other or turn the scale in-line. 2. Call your authorized service representative.	○	○
SEQUENCE ERROR	The power was not turned OFF and ON again after setting ID #.	Turn the power switch OFF and ON again.	○	○
SEQUENCE NO. ERROR	Text data number is incorrect.	Call your authorized service representative.	—	○
MASTER BUSY	Registration job is performed on a satellite scale while reset job is performed on the master scale.	1. Quit reset job on the master scale. 2. Quit registration job on the satellite scale.	—	○
BACKUP MASTER NOT RESET	The backup master does not have same PLU with the master scale.	Down load PLU from the master to the backup master scale. Then run the reset operation again.	○	—
TEXT ERROR ##	1. Error text is found. 02: Sequence No. error 05: LRC error 08: Text error 09: Command error 2. The master scale differs from other scale in ROM version.	Call your authorized service representative.	○	○

M: Master scale BM: Backup master scale S: Satellite scale

17. CLEANING THE PRINT HEAD

If the print head is dirty, printing will not be clear. The print head should be cleared with a print head cleaner everyday before use, according to the following procedure:

1. Open the label cover and remove the label cassette. (See page 9-1)
2. Clean the print head element with the print head cleaner.



3. Clean the print head element with the print head cleaner.

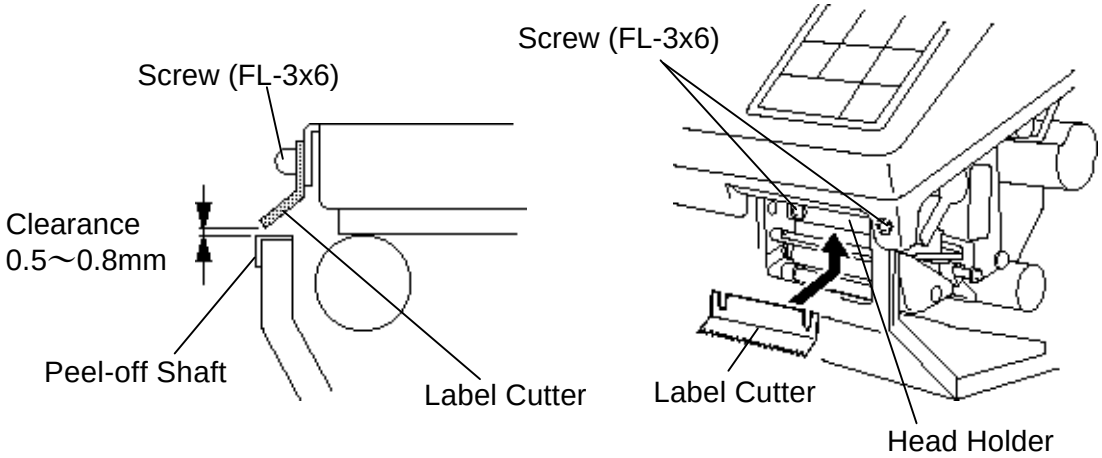
NOTE: *Be careful not to damage the print head when cleaning.*

4. If any label paste is found on the label cutter, wipe off the paste with alcohol.

■ After removing the label cutter, reattach it using the following procedure.

WARNING!
Care must be taken not to injure your fingers with the label cutter during installing, removing or cleaning it.

1. Install an unloaded label cassette on the scale.
2. Install the label cutter, aligning the cutter notches with the screw holes.
3. Secure the cutter with the screws (FL-3×6) so the bottom of the cutter is 0.5～0.8 mm above the peel-off plate.



NOTES: *1. If the cutter is scratching labels during printing, increase the clearance between the cutter and the peel-off plate.*

2. When the cutter is stained with glue or paper dust, clean it with a cotton bud moistened with alcohol.

18. TROUBLESHOOTING

18. TROUBLESHOOTING

WARNING!

This scale has been manufactured under strict quality control. If you have any trouble, however, DO NOT ATTEMPT TO FIX IT BY YOURSELF. Pull the power plug out of the outlet, and contact your Authorized Service representative.

Problems	Solution
" ----- " is displayed at power on.	● Was the power turned ON when something was on the platter? → Make sure nothing is on the platter and turn the power on again. ● Is the platter mounted correctly? → Mount the platter correctly and turn the power on again.
Display unstable.	● Is anything touching the platter? → If so, remove it. ● Is the machine in a windy location? → Avoid locations subject to the wind.
No print.	1. Check that the media is loaded correctly. 2. Check whether the print head is set correctly or not.
Dots missing in the print.	Dirty print head. → Clean the print head. Call your Authorized Service representative if necessary.
Unclear (or blurred) printing.	1. Dirty print head. → Clean the print head. 2. Poor media quality. → Change media type.
Power does not come on.	1. Plug power cord into an AC socket. 2. Check the circuit breakers or fuses. 3. Plug another appliance into the AC socket to check if there is power supplied. Call your Authorized Service representative if necessary.
You see a raised nap where the media has been cut.	1. Clean the cutter blades. 2. The blades are worn. → Call your Authorized Service representative.

■ Before You Call for Service

It is our primary concern to give you full satisfaction and better service. If, however, any problem arises in connection with the operation of this scale, please check the following points before calling for service:

A) Is the power plug fully plugged into an AC outlet?
B) Is the power turned ON?
C) Is AC power being properly supplied to the outlet? (Check it using another electric appliance.)
D) Check the circuit breaker.
E) Has there been a power failure of any sort?
F) Has the operation been carried out in the correct order?

TOSHIBA TEC CORPORATION

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